

PUBLISHED IN CONNECTION WITH THE ANNUAL, AND  
FOR ITS SUBSCRIBERS ONLY, AT \$15.00 PER YEAR.

VOL. I.

AUGUST.

# THE SATELLITE

OF THE

ANNUAL OF THE UNIVERSAL  
MEDICAL SCIENCES.



## A QUARTERLY REVIEW

OF THE MOST IMPORTANT ARTICLES APPEARING IN  
THE MEDICAL PRESS AT LARGE.

---

EDITED BY

CHARLES E. SAJOUS, M. D.

PHILADELPHIA:

F. A. DAVIS, PUBLISHER, 1217 FILBERT STREET.

1887.



## TABLE OF CONTENTS.

DISEASES OF INFANCY AND CHILDHOOD.	PAGE	DISEASES OF THE MIND AND NERVOUS SYSTEM	PAGE
A case presenting simultaneously a scarlatinal and variolous rash. <i>Netolitzky</i> .....	10	Cerebral localization. <i>Hun</i> .....	32
Antipyrin in chorea. <i>Wollner</i> .....	13	Chorea. <i>Lewis, Frühwald, Sturgis</i> .....	42
Antipyrin in whooping-cough. <i>Sonnenberger</i> .....	12	Dosimetric treatment of Melancholia. <i>Burg-graefe</i> .....	31
Heroic dose turpentine in croup. <i>Leventquer</i> .....	9	Epilepsy. <i>Bennet, Gould, and Rush</i> .....	36
Iodide of potassium in diphtheria. <i>Stepp</i> ..	8	Experimental researches on mercurial poisoning; lesion of the peripheral nerves. <i>Letulle</i> .....	39
Management of weak and immature infants. <i>Tarnier</i> .....	13	Hysteria. <i>Frere, Charcot, Rabinski, Moricourt, Brissau and Marie</i> .....	34
Maximum dosage for children. <i>Buttin</i> .....	16	Meningitis. <i>Skeer, Lauschmann, Henoch, Day</i> .....	33
Peroxide of hydrogen in whooping-cough. <i>Richardson</i> .....	12	Multiple neuritis. <i>Starr</i> .....	38
Personal disinfection of the patient in scarlet fever. <i>Love</i> .....	10	Neuritis plantaris. <i>Hughes</i> .....	40
Pilocarpine in diphtheria. <i>Lax</i> .....	8	Partial responsibility of the insane. <i>Ball and Ireland</i> .....	31
Sulphurous acid fumigation in whooping-cough. <i>Mohn</i> .....	12	Peripheral neuritis and the painful paralyses of early life. <i>Chapin</i> .....	40
The antiseptic treatment of summer diarrhoea. <i>Holt</i> .....	3	Recent investigations of the knee-jerk. <i>Westphal, Lombard, and Curtis</i> .....	36
The condition of the larynx in whooping-cough. <i>Von Herff</i> .....	11	The treatment of neuralgia. <i>Ducroux, Guesdon, Grognot, Tait, Hinsdale, Dercum, and Ungar</i> .....	42
The contagious diarrhoea of nursing children and its bacillus. <i>Hayem</i> .....	7	Tropical beri-beri. <i>Seguin</i> .....	41
The galvano-cautery in diphtheria. <i>Bloebaum</i> .....	9		
Tyrotrocon and cholera infantum. <i>Vaughan</i> .....	6		
Vinegar as an antiseptic in diphtheria. <i>Engelman</i> .....	9		
Warm baths in measles. <i>Cohn</i> .....	11		
		GYNÆCOLOGY AND OBSTETRICS.	
GENERAL MEDICINE.		A case of vaginal hysterectomy. <i>Richelot</i> ..	49
Aneurism of the aorta, and aneurism of the aorta in early life. <i>Sanné</i> .....	22	Fifty cases of ovariectomy. <i>Keith</i> .....	51
Bovine tuberculosis; its communication by ingestion, inhalation, and hereditary transmission; also its dangers to the public health. <i>Blaine</i> .....	23	On certain anatomical relations of the uterine artery and of the ureter, apropos of vaginal hysterectomy. <i>Ricard</i> .....	50
Cyclic albuminuria. <i>Klemperer</i> .....	27	Placenta prævia. <i>Editorial, Medical News</i> ..	54
Heart strain and weak heart. <i>Robinson</i> .....	20	The general principles involved in the operations of removal of the uterine appendages. <i>Tait</i> .....	46
Oil of sandal wood in the treatment of fetid bronchitis. <i>Da Costa</i> .....	26	The treatment of <i>post-partum</i> hemorrhage. <i>Turazza</i> .....	53
On some forms of albuminuria not dangerous to life. <i>Stewart</i> .....	29	The treatment of uterine displacements by galvanic and faradic electricity. <i>Engelman</i> .....	48
On the disappearance of the aortic regurgitant murmur. <i>Saundby</i> .....	19	Treatment of fibroid tumors of the uterus by electrolysis, etc. <i>Martin</i> .....	52
On the relation of acute general tuberculosis to old localized tubercular lesions. <i>Jaccoud</i> .....	25	Vaginal pressure in the treatment of chronic pelvic disease. <i>Jackson</i> .....	44
Phosphate of lime in the night-sweats of phthisis. <i>Rebory</i> .....	23		
Primary tricuspid insufficiency, caused by vegetating endocarditis. <i>Malibran</i> .....	21	HYGIENE AND MEDICINE AMONG THE ZULUS	57
The treatment of asthma. <i>Lazarus</i> .....	27	LEPROSY IN VENEZUELA.....	60
The treatment of phthisis by medicated gaseous enemata. <i>J. C. Wilson</i> .....	23		
Valvular disease of the heart unattended by serious symptoms. <i>Clark</i> .....	17	PUBLISHER'S DEPARTMENT.	
		A new method of making medicines.....	65
		Horsford's acid phosphate .....	66
		Therapeutic value of mineral waters.....	66

## PURCHASING DIRECTORY.

Coca Wine, etc.....	Enterprise Chemical Co.....	Page 1
Surgical Instruments.....	William Snowden .....	2
Horsford's Acid Phosphate.....	Rumford Chemical Works.....	Fourth Cover
Seltzer Aperient.....	Tarrant & Co.....	3
Medical Home.....	Dr. E. C. Mann.....	4
Medical Books and Charts.....	F. A. Davis.....	Third Cover and 4



EDITORIAL STAFF  
OF  
THE SATELLITE  
OF THE  
ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES.

---

**DISEASES OF INFANCY AND  
CHILDHOOD.**

LOUIS STARR, M.D.,

Clinical Professor of Diseases of Children in the  
Hospital of the University of Pennsylvania.

ASSISTED BY

D. J. M. MILLER, M.D.,

Physician to the Episcopal Hospital and Assistant  
Physician to the Children's Hospital, Phila.

---

**GYNÆCOLOGY AND OBSTETRICS.**

WM. H. PARISH, M.D.,

Obstetrician and Gynæcologist in the Philadelphia  
Hospital, and Professor in the Woman's Medi-  
cal College, Philadelphia.

---

**GENERAL MEDICINE.**

JAMES C. WILSON, M.D.,

Physician to the Philadelphia and Jefferson Medical  
College Hospitals, Philadelphia, etc.

---

**DISEASES OF THE MIND AND  
NERVOUS SYSTEM.**

CHARLES K. MILLS, M.D.,

Professor of Diseases of the Mind and Nervous Sys-  
tem in the Philadelphia Polyclinic and College  
for Graduates in Medicine,

AND

JAMES HENDRIE LLOYD, M.D.,

Instructor in Electro-Therapeutics in the University  
of Pennsylvania.

**GENERAL SURGERY.**

THOMAS G. MORTON, M.D.,

Surgeon to the Pennsylvania and Orthopædic  
Hospitals Philadelphia,

ASSISTED BY

THOS. S. K. MORTON, M.D.,

Philadelphia.

---

**OPHTHALMOLOGY.**

WILLIAM THOMSON, M.D.,

Professor of Ophthalmology in Jefferson Medical  
College, Philadelphia,

ASSISTED BY

GEORGE FRIEBIS, M.D.,

Chief of Clinic Ophthalmological Department, Jef-  
ferson Medical College Hospital.

---

**OTOLOGY.**

CHAS. S. TURNBULL, M.D., PH.D.,

Aural Surgeon to the Jewish, German, and St.  
Christopher Hospitals, Philadelphia.

ASSISTED BY

CHAS. L. WEED, M.D.,

Chief of Clinic Ophthalmological and Aural De-  
partments German Hospital, Philadelphia.

---

**DERMATOLOGY.**

ARTHUR VAN HARLINGEN, M.D.,

Professor of Dermatology in the Philadelphia  
Polyclinic and College for Graduates, etc.

---

**LARYNGOLOGY AND RHINOLOGY.**

CHAS. E. SAJOUS, M.D.,

Lecturer on Laryncology and Rhinology in the Spring  
Course of Jefferson Medical College, Phila.



# EDITORIAL STAFF

## OF THE

# ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES.

Chief Editor, DR. CHARLES E. SAJOUS, Philadelphia.

## ASSOCIATE STAFF.

### VOLUME I.

#### Obstetrics, Gynæcology, Pediatrics, Anatomy, Physiology and Pathology.

Prof. Wm. L. Richardson . . . . . Boston	Prof. E. C. Dudley . . . . . Chicago
Prof. Theophilus Parvin . . . Philadelphia	Prof. W. H. Parish . . . . . Philadelphia
Prof. Louis Starr, . . . . . "	Prof. William S. Forbes . . . . . "
Prof. J. Lewis Smith . . . . . New York City	Prof. H. Newell Martin and Dr. W. H. Howell, Baltimore.
Prof. Paul F. Mundé . . . . . "	Dr. Chas. S. Minot . . . . . Boston
Prof. William Goodell and Dr. W. C. Goodell, Philadelphia.	Dr. E. O. Shakespeare . . . Philadelphia

### VOLUME II.

#### Diseases of the Respiratory, Circulatory, Digestive and Nervous Systems; Fevers, Exanthemata, etc., etc.

Prof. A. L. Loomis . . . . . New York City	Prof. E. C. Spitzka . . . . . New York City
Prof. Jas. T. Whittaker . . . . . Cincinnati	Prof. Francis Delafield . . . . . "
Prof. W. H. Thomson . . . . . New York City	Prof. Jas. Tyson . . . . . Philadelphia
Prof. W. W. Johnston . . . . . Washington	Prof. John B. Hamilton . . . . . Washington
Prof. Jos. Leidy . . . . . Philadelphia	Prof. N. S. Davis . . . . . Chicago
Prof. E. C. Seguin . . . . . New York City	Prof. John Guitéras . . . . . Charleston, S. C.
Prof. Chas. K. Mills and Dr. J. H. Lloyd, Philadelphia.	Dr. Jas. C. Wilson . . . . . Philadelphia

### VOLUME III.

#### General Surgery, Orthopædic Surgery, Venereal Diseases, Anæsthetics, Surgical Dressings, Dietetics, etc., etc.

Prof. D. Hayes Agnew . . . . . Philadelphia	Prof. Christopher Johnston . . . . . Baltimore
Prof. Hunter McGuire . . . . . Richmond	Prof. Jno. B. Roberts . . . . . Philadelphia
Prof. Lewis A. Stimson . . . . . New York City	Dr. T. G. Morton and Dr. William Hunt, Philadelphia.
Prof. P. S. Conner . . . . . Cincinnati	Dr. Morris Longstreth . . . . . Philadelphia
Prof. J. Ewing Mears . . . . . Philadelphia	Dr. Chas. Wirgman . . . . . "
Prof. E. L. Keyes . . . . . New York City	Dr. C. C. Davidson . . . . . "
Prof. N. Senn . . . . . Milwaukee	
Prof. J. E. Garretson . . . . . Philadelphia	

### VOLUME IV.

#### Ophthalmology, Otology, Laryngology, Rhinology, Dermatology, Hygiene, Disposal of the Dead, etc., etc.

Prof. William Thomson . . . . . Philadelphia	Dr. Albert L. Gihon . . . . . Mare I., Cal.
Prof. J. Solis Cohen . . . . . "	Dr. Chas. S. Turnbull . . . . . Philadelphia
Prof. D. Bryson Delavan . . . . . New York City	Dr. John G. Lee . . . . . "
Prof. A. Van Harlingen . . . . . Philadelphia	Dr. C. E. Sajous . . . . . "
Prof. H. M. Lyman . . . . . Chicago	

### VOLUME V.

#### General and Experimental Therapeutics, Medical Chemistry, Medical Jurisprudence, Climatology, etc., etc.

Prof. William Pepper . . . . . Philadelphia	Dr. R. J. Dunglison . . . . . Philadelphia
Prof. F. W. Draper . . . . . Boston	Dr. W. P. Manton . . . . . Detroit, Mich.
Prof. J. W. Holland . . . . . Philadelphia	Dr. Hobart A. Hare . . . . . Philadelphia
Prof. A. L. Ranney . . . . . New York City	Dr. C. S. Witherstine . . . . . "



WELLCOME INSTITUTE LIBRARY	
Coll.	WelMOMec
Coll.	
No.	

## CORRESPONDING STAFF.

(PARTIAL LIST.)

Prof. A. A. Brown, Montreal . . . Canada	Dr. F. Van Leent, Amsterdam . . . Holland
Prof. J. F. Graham, Toronto . . . "	Prof. A. A. G. Guye, Amsterdam . . . "
Prof. T. G. Roddick, Montreal . . . "	Prof. Wm. M. Gunning, Amsterdam . . . "
Prof. James Stewart, Montreal . . . "	Prof. G. H. Van der Mey, . . . "
Prof. George Ross, Montreal, . . . "	Prof. A. C. Dobroslavine, St. Petersburg, Russia
Dr. Ruttan, Montreal . . . . . "	Dr. T. Hering, Warsaw, Poland . . . "
Dr. George W. Major, Montreal . . . "	Dr. Charles Beni, Warsaw, Poland . . . "
Dr. Buller, Montreal . . . . . "	Dr. W. Lubelski, Warsaw, Poland . . . "
Dr. T. S. Lathern, Halifax . . . Nova Scotia	Dr. Levyson, Copenhagen . . . . . Denmark
Prof. Dujardin Beaumetz, Paris . . . France	Dr. Mygind, Copenhagen . . . . . "
Prof. E. Landolt, Paris . . . . . "	Dr. Madsew, Copenhagen . . . . . "
Prof. P. Ménière, Paris . . . . . "	Prof. Valdescū, Bucharest . . . Roumania
Prof. A. Gouguenheim, Paris . . . . . "	Dr. J. Marzulus, Bucharest . . . . . "
Dr. J. Lucas Championnière, Paris . . . "	Prof. F. Vulliet, Geneva . . . . . Switzerland
Dr. E. Cadet de Gassicourt, Paris . . . "	Dr. Virgilio Machado, Lisbon . . . Portugal
Dr. Bourneville, Paris . . . . . "	Dr. F. Ecklund, Stockholm . . . . . Sweden
Dr. de Saint-Germain, Paris . . . . . "	Dr. G. S. Dobrashian, Constantinople, Turkey
Dr. L. Doléris, Paris . . . . . "	Dr. H. J. Giragosian, Constantinople, . . . "
Dr. P. de Pietra Santa, Paris . . . . . "	Prof. Moncorvo, Rio Janeiro . . . . . Brazil
Prof. M. Sānger, Leipsic . . . . . Germany	Dr. Vierra de Mello, Rio Janeiro . . . . . "
Prof. Helferich, Griefswald . . . . . "	Dr. J. C. de Bittencourt, Rio Janeiro, . . . "
Prof. J. Hirshberg, Berlin . . . . . "	Prof. Eman'l Dagnino, Maracaibo, Venezuela
Prof. Bernard Frānkel, Berlin . . . . . "	Dr. H. Strachan, Kingston . . . . . Jamaica
Dr. H. Krause, Berlin . . . . . "	Dr. Ramon Mejia, Buenos Ayres, Argentine
Prof. M. F. Roszbach, Jena . . . . . "	Republic.
Prof. Arthur Hartmann, Berlin . . . . . "	Dr. Angel Brian, Montevideo . . . Uruguay
Dr. A. Baginsky, Berlin . . . . . "	Dr. Rodolfo Herdocia, Leon . . . Nicaragua
Dr. Leopold Laquer, Frankfort . . . . . "	Dr. Ramirez Fontecha, Tegucigalpa, Hon-
Dr. M. Alsberg, Cassel . . . . . "	duras.
Prof. Adam Politzer, Vienna . . . . . Austria	Dr. E. F. Plā, Havana . . . . . Cuba
Prof. Ottokar Chiari, Vienna . . . . . "	Dr. J. L. Fernandez, Havana . . . . . "
Priv. Doc. Franz Mracek, Vienna . . . . . "	Dr. J. A. S. Grant (Bey), Cairo . . . Egypt
Prof. Ritter Von Jaksch, Gratz . . . . . "	Dr. H. T. Batchelor, Queenstown, Cape
Priv. Doc. J. Heitzmann, Vienna . . . . . "	Colony.
Priv. Doc. S. Klein, Vienna . . . . . "	Dr. J. Dalzell, Umsiga . . . . . Natal
Prof. F. Massēi, Naples . . . . . Italy	Dr. Joseph P. Cochran, Ooromia . . . Persia
Prof. P. Albertoni, Belogna . . . . . "	Dr. W. W. Torrence, Teheran . . . . . Persia
Prof. Rufalini, Siena . . . . . "	Dr. Ohan Gaidzagian, Adana . . . Asia Minor
Prof. Raimondi, Siena . . . . . "	Dr. P. D'E. Wheeler, Jerusalem, Palestine
Prof. Guaita, Siena . . . . . "	Prof. C. F. Dight, Beirut, . . . . . Syria
Prof. Stefani, Ferrara . . . . . "	Dr. F. J. McKinnon, Damascus . . . . . "
Prof. Patella, Padova . . . . . "	Dr. B. I. Manasseh, Brummana, Turkey in
Prof. Campano, Genoa . . . . . "	Asia.
Prof. Pisenti, Perugia . . . . . "	Dr. S. C. Seward, Allahabad, Central India
Prof. Grocco, Perugia . . . . . "	Dr. Mary P. Root, Madura, South India
Prof. R. de la Sota y Lastra, Seville . . . Spain	Dr. A. M. Condict, Bombay, . . . East India
Prof. Angel Pulido, Madrid . . . . . "	Dr. R. Johnson, Dera Ismail Khan, Be-
Prof. Benito Alcina, Cadiz . . . . . "	loochistan.
Prof. R. Rodriguez Mendez, Barcelona . . . . . "	Dr. H. H. McCandliss, Hainan, . . . China
Prof. Tolosa Latour, Madrid . . . . . "	Dr. Rob. Coltman, Chinanfoo . . . . . "
Prof. D. V. Chiralt y Selma, Seville . . . . . "	Dr. F. W. Harrell, Tokio . . . . . Japan
Prof. P. K. Pel, Amsterdam . . . . . Holland	Dr. W. R. Lanebuth, Kobe . . . . . "
	Dr. H. N. Allen, Seoul . . . . . Korea

A SPECIAL STAFF IS BEING ORGANIZED FOR THE UNITED KINGDOM.



## INTRODUCTION.

---

IN publishing THE SATELLITE, the editorial and publishing departments of THE ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES are but carrying out their original plan—to study the wants of the subscribers, and do all in their power to meet them. THE ANNUAL will present yearly, in the form of elaborate special articles, the progress of the medical world at large; THE SATELLITE, its comparatively diminutive companion, will present every three months, abstracts of the most important practical articles published in the general medical press. The subscriber will thus not only obtain yearly information as to the general progress, but he will be kept informed *during* the year of all the most important strides in his profession, and that in a manner most useful to him in his daily work.

The arrangement of matter will be such as to present the different departments in their strongest light at the most opportune time of the year. Diseases of infancy, for instance, will receive greatest attention in the summer number, while diseases of the throat, etc., will appear in the fall and winter numbers. Practical suggestions will thus come when most needed, and therefore be of greatest service.

In addition to the collection of abstracts, each number will contain two original articles from the pens of foreign correspondents of THE ANNUAL, upon topics of interest pertaining to the countries inhabited by them.

As stated on the cover, THE SATELLITE is included in the subscription price of THE ANNUAL, and therefore involves no increased expense on the part of the subscriber.



# The Satellite

OF THE

## ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES.

---

VOL. I.

PHILADELPHIA, AUGUST, 1887.

No. 1.

---

### DISEASES OF INFANCY AND CHILDHOOD.

UNDER THE CHARGE OF

**LOUIS STARR, M.D.,**

Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania,

ASSISTED BY

**D. J. M. MILLER, M.D.,**

Physician to the Episcopal Hospital and Assistant Physician to the Children's Hospital, Philadelphia.

---

### THE ANTISEPTIC TREATMENT OF SUMMER DIARRHŒA.

In a paper read before the New York Academy of Medicine, Dr. L. Emmett Holt, while insisting upon the value of attention to hygiene and change of air in the treatment of summer diarrhœa, calls attention to other methods of medication than those included in the very prevalent opium and astringent plans.

At the foundation of the disease there is a dyspeptic condition, induced by excessive heat, improper or artificial feeding, and bad hygienic surroundings. The age of greatest susceptibility shows that heat cannot be the only causal factor, for it is less common between birth and the sixth month, the age of least resistance to extremes of temperature, than later. This comparative immunity is explained by the fact that the majority of children, under six months, are fed at the mother's breast.

Heat depresses vitality, vastly increases decomposition in the streets and sewers, thus vitiating the atmosphere, and most of all produces putrefactive changes in artificial food before it is taken into the stomach. These changes being especially likely to take place in milk.

The poisons produced from food, or ptomaines, are important elements in the etiology. Brunton has stated that most of the alkaloids resulting from the decomposition of albumen cause diarrhœa, and many of the nervous symptoms of summer diarrhœa may be due to the effects of these alkaloids,—a species of toxæmia occurring, especially when the discharges are suddenly arrested, either spontaneously or through the influence of drugs.



The inflammatory lesions found in the intestines are to be regarded as a consequence of the diarrhœa, rather than the cause. This view is favored by the most marked alterations being always found in the cæcum and sigmoid flexure, just where the irritating substances are longest detained in their passage.

Though multitudes of bacteria are found in the discharges, the question of the existence of a special microbe is still *sub judice*.

The indications for treatment may be grouped under four heads: 1. To clear out the bowels; 2. To stop decomposition; 3. To restore healthy action in the alimentary tract; 4. To treat the consecutive lesions.

1. The bowels should be emptied as completely as possible, as the first step in the treatment, and for precisely the same reasons that the surgeon cleanses a wound thoroughly before applying the antiseptic dressing. This rule holds good not only where there is a history of antecedent constipation, or the evidence of the presence of indigestible food in the alimentary tract, but in every case in which there are altered secretions undergoing putrefactive changes. The only instances in which the process of cleansing should not be undertaken, because unnecessary, are those where, after two or three fecal or semi-fecal evacuations, the discharges consist of almost pure serum, large in amount, alkaline in reaction, and odorless.

To sweep out the intestinal canal nothing compares in efficacy with castor oil. Should the stomach be very irritable, however, it will be necessary to substitute enemata. These should consist of pure water at a temperature of 65° Fahr., and to be efficient must be copious enough to reach the cæcal valve,—about one pint in a child of six months, and two pints in one of two years. The injection must be given slowly, with a fountain syringe, the abdomen meanwhile being gently manipulated.

Many mild cases can be cured, if taken at the start, by castor oil and a strict diet alone.

2 and 3. To stop decomposition and restore a healthy action in the intestines, the administration of antiseptics and attention to diet are necessary.

Antiseptics must be given in small doses lest the stomach reject them, and frequently to maintain a continuous action. The best are salicylate of sodium and naphthalin. Salicylate of sodium is prescribed in doses of from one to three grains every two hours, according to the age, from three months to three years. An aqueous solution is tasteless, and can be readily given in the food or drink; it has a tendency to check rather than occasion vomiting. Naphthalin, although possessing a strong odor, is not disagreeable to the taste. On account of its insolubility, it is best administered rubbed up with



some inert powder like sugar of milk. The doses should be larger than those of the salicylate of sodium,—one to five grains according to the age.

Resorcin and bichloride of mercury are also useful antiseptics. Resorcin is bitter, and, though freely soluble in water, not easily administered; the dose is one-half a grain to two grains. The bichloride is given in doses of  $\frac{1}{120}$ th to  $\frac{1}{100}$ th of a grain, but even in these minute quantities frequently causes vomiting.

If vomiting be present, all food must be stopped for from twelve to twenty-four hours, and the thirst quenched by thin barley-gruel or mineral waters,—cold, and in small quantities. If the child be at the breast, as soon as vomiting is checked, it can gradually be brought back to its accustomed diet, care being taken that too much food be not taken. In bottle-fed children under two years, it is better to *withhold milk entirely*; wine-whey, chicken and mutton broth, Mellin's food with barley-gruel, the juice expressed from rare beefsteak or roast beef, and sometimes raw-scraped beef, should constitute the "no-milk diet."

4. The essential consecutive lesions are in the colon, and consist practically of a follicular colitis. When the condition of ulceration is reached, astringents by the mouth are useless, with the possible exception of bismuth.

Three things are valuable:

*First.* As careful attention to the diet as during the acute stages, and in recent cases. Deviation from dietetic rules is the most frequent cause of relapse.

*Second.* The continuance of antiseptics to check intestinal decomposition and hence stop irritation.

*Third.* The whole large intestine should be washed out once every day, either with pure water at 65° Fahr., or with weak antiseptic or astringent solutions. Of the former the best are benzoate or salicylate of sodium; of the latter, nitrate of silver or tannic acid.

Of 300 cases treated by the old method (opium and astringents): 50 per cent. were cured; 27 per cent. improved; 18 per cent. unimproved, and 7 per cent. died. Of 81 similar cases, treated by an initial dose of castor oil, followed by salicylate of sodium, 84 per cent. were cured; 7 per cent. improved; 7 per cent. unimproved, and 1.2 per cent. died. Forty-four cases treated by naphthalin, preceded by oil: 67 per cent. cured; 15 per cent. improved; 13 per cent. unimproved, and 2 per cent. died. Resorcin, used in 27 cases, gave 55 per cent. cured; 22 per cent. improved; 22 per cent. unimproved, and no deaths.

Dr. Holt draws the following conclusions from his studies:—

*First.*—Summer diarrhœa is not to be regarded as a disease depending upon a single morbid agent.



*Second.*—The remote causes are many, and include heat, mode of feeding, surroundings, dentition, and many other factors.

*Third.*—The immediate cause is the putrefactive changes which take place in the stomach and bowels in food not digested, which changes are often begun outside the body.

*Fourth.*—These products may act as systemic poisons, or the particles may cause local irritation and inflammation of the intestines.

*Fifth.*—The diarrhœal discharges, at the outset at least, are to be looked upon as salutary.

*Sixth.*—The routine use of opium and astringents in these cases is not only useless, but, in the beginning particularly, may do positive harm, since, by checking peristalsis, opium stops elimination and increases decomposition.

*Seventh.*—I do not deny nor undervalue opium in many other forms of diarrhœa than the one under discussion.

*Eighth.*—Evacuants are to be considered an essential part of the antiseptic treatment.

*Ninth.*—Experience thus far leads me to regard naphthalin and the salts of salicylic acid as the most valuable antiseptics for the intestinal tract.—*Gaillard's Medical Journal*, March 17, 1887.

#### TYROTOXICON AND CHOLERA INFANTUM.

At a recent meeting of the Michigan State Board of Health, Dr. Vaughan reported a case of cholera infantum occurring in a healthy infant, seven months old, who was partly breast- and partly bottle-fed. The attack came on suddenly after the ingestion of a bottleful of cow's milk.

The milk came from an apparently undiseased animal, kept by a neighbor, and in the evening of the day of attack, two quarts of the morning milking were secured for examination. The fluid looked like rich cream, having a yellow tint throughout. It was allowed to stand for twelve hours in a refrigerator, when, upon pouring the milk from the pitcher, there remained at the bottom about two ounces of a Portwine colored fluid. This showed, under the microscope, pus and blood-corpuscles, and blood was also detected by obtaining the characteristic bands of oxyhemoglobine with the spectroscope. The decanted milk, which had coagulated, was filtered, and the strongly acid filtrate, rendered alkaline with potassium hydrate, was agitated with absolute ether. On separation, after standing, the ether was removed with a pipette, and allowed to evaporate spontaneously. Next, the residue was redissolved in distilled water and again agitated with ether. This second ethereal solution, after spontaneous evaporation, left a brownish material, having the odor and taste of tyrotoxon, and a portion of it administered to a cat produced retching and vomiting.



The patient improved steadily under simple treatment, after the withdrawal of the milk, but upon two separate occasions suffered from purging and vomiting on an attempt being made to give milk taken from another, perfectly healthy cow. One of these attempts was made four weeks, the other about five weeks after the original seizure. On account of this tendency to recurrence of trouble, it is probable that not only the poison, but the ferment generating it, were introduced into the alimentary canal at the same time, and that the latter remained with active power to affect pure milk for a considerable period after its ingestion.

It yet remains to ascertain the exact nature of the ferment concerned in the production of tyrotoxicon, and to determine by experiments upon inoculated milk the value of various germicides. Many physicians claim that the bichloride of mercury, in proper doses, is a valuable agent in the treatment of cholera infantum.—*Medical News*, March 25, 1887.

#### THE CONTAGIOUS DIARRHŒA OF NURSING CHILDREN AND ITS BACILLUS.

By the failure of general medication to prevent relapses of diarrhœa in infants, Hayem was led to order all bedding and linen of the little patients to be disinfected with the bichloride of mercury. By this means the disease, which had become epidemic, was checked.

An examination of the stools showed that the greenish color present was due to masses of bacilli and substances formed by them. Cultures were readily made of their microbes, and their behavior toward different antiseptics observed. The reaction of the material with which they were voided was found to be neutral or alkaline, and accordingly the effect of acids was tried. It was found that lactic acid, in small quantities even, destroyed the cultures made upon peptonized gelatin. Teaspoonful doses of a solution of two parts of lactic acid to one hundred of water, administered fifteen minutes after nursing, produced excellent results, surpassing naphthalin, iodoform, sulphide of mercury, and calomel.

The conclusion is, that the altered gastric secretions in the dyspepsias of nurslings, permit the microbes to enter the intestinal canal with their germinating powers intact, and finding there an alkaline medium they increase rapidly.

Hayem considers that the stools received upon the napkins contain the contagious elements. The following formula, recommended by Vigier, may be found useful:—

R.	Lactic acid	.	.	.	.	.	.	2 parts.
	Simple syrup	.	.	.	.	.	.	98 parts.
	Lemon juice	.	.	.	.	.	.	q. s.

Filter and administer from two to three teaspoonfuls daily.



Koch has shown, in his studies of the comma-bacillus of cholera, that they are destroyed by the lactic acid of the normal gastric juice, and that it is when the activity of this physiological safeguard is interfered with or destroyed, that the bacilli pass unharmed into the intestines, to multiply and produce the characteristic disturbance there. The effect of lactic acid upon these microbes, suggests the acids as a class of germicides, the study of which promises information of the most practical value.—EDITORIAL. *Medical News*, July 9, 1887.

#### PILOCARPINE IN DIPHTHERIA.

Dr. Lax has successfully treated a number of cases of diphtheria with pilocarpine. Under the influence of this drug the mucus and salivary secretions are greatly increased, large quantities of diphtheritic membrane are expelled from the throat and nose, respiration becomes more free, fever disappears, appetite returns, and convalescence is established in from three to five days. At the close of the attack every case manifested a characteristic eruption of herpes labialis.

The following formula was employed:—

R.	Pilocarpin. hydrochlorat.	.	.	.	gr. $\frac{1}{3}$ – $\frac{3}{5}$ .
	Pepsinæ	.	.	.	gr. x–xij.
	Acid. muriat dil.	.	.	.	ʒ ij–ijj.
	Aquæ dest.	.	.	.	fʒxviiss. M.

Of this mixture from one to four teaspoonfuls were administered in wine, and warm fomentations were applied to the throat.

Guttman has treated in a year and a half eighty-one cases of diphtheria by pilocarpine, without the loss of a single patient. Gelsner and Dilewsky have also had good results from this treatment. The prescription given above may be varied as each case indicates, as also its dose.—*Journal de Médecine*, February 6, 1887.

#### IODIDE OF POTASSIUM IN DIPHTHERIA.

Dr. L. Stepp (*Deutsche Med. Wochenschrift*) prefers iodine to mercury in the treatment of diphtheria, which disease he compares to syphilis in its tendency to invade the bucco-pharyngeal mucous membrane, and thereby affect the neighboring glands. Iodide of potassium is decomposed in the organism, and iodine remains in the blood and other liquid elements, and in the glands, where it amalgamates with albuminoid molecules, and possibly with bacteria; in any case it sterilizes media in which bacteria develop. The dose required is even larger than in syphilis, for example, in one grave case—a boy of seven years—that terminated favorably, fifty grammes of the iodide were administered in the course of one week.—*Maryland Medical Journal*, March 26, 1887.



## VINEGAR AS AN ANTISEPTIC IN DIPHTHERIA.

Dr. Engelman has performed a number of experiments tending to give vinegar a place among the antiseptic agents for the treatment of diphtheria.

In a severe case, where there was urgent necessity for interference, the author used vinegar as an application to the interior of the throat. Employing the liquid pure, as a wash, one part to two for atomization, and one part to four for gargling. The result was most favorable, and gave encouragement to further investigate the subject.

One, two, three, four, and five per cent. solutions of carbolic acid were selected as standards of comparison. To these were added variable proportions of putrid liquid, containing bacteria. Three to ten parts of vinegar is sufficient to completely arrest the development of the micro-organisms in ten parts of putrid liquid; while from ten to twenty parts of a five per cent. solution of carbolic acid is required to produce the same effect. Many repetitions of the experiments gave the same result.

Should these observations be fully confirmed, vinegar can, under certain circumstances, be advantageously substituted for the more familiar antiseptics.—*L'Union Médicale*.

## THE GALVANO-CAUTERY IN DIPHTHERIA.

At the late Medical Congress held at Wiesbaden, Dr. Bloebaum, of Coblenz, read a paper advocating the use of the galvano-cautery in diphtheria.

He found, in the cases treated, that the application of the red-hot platinum wire, even without the use of cocaine, caused very little pain, that the cauterized sores were totally sterilized, the fever disappeared, the membranes did not reform, and that no local inflammation followed the burning. These results were obtained without the aid of antiseptics or antithermic medicines, and confidence is expressed that "the number of deaths must be reduced to a minimum if the patients are treated in the proper manner without loss of time by the platinum loop"—*Edinburgh Medical Journal*, February, 1887.

## HEROIC DOSE OF TURPENTINE IN CROUP.

In an obstinate and dangerous case of diphtheritic croup, Dr. Lewentauer, of Constantinople, as a last resort, before performing tracheotomy, administered a teaspoonful of pure oil of turpentine, followed by some warm milk. In a quarter of an hour the labored laryngeal breathing gave place to normal respiratory sounds, the child slept well during the succeeding night, and was quite free from brassy cough which had previously been present. The next morning he was lively and ready to play with his toys. All trace of the false membrane had



disappeared from the pharynx, which merely presented a reddened surface. Convalescence was rapid and uninterrupted, though the turpentine produced an eruption on the face, trunk, and extremities, having the appearance of measles rash, but of a lighter red color. This faded completely in two days, and was not followed by desquamation.—*Lancet*, February 5, 1887.

A CASE PRESENTING SIMULTANEOUSLY A SCARLATINAL  
AND VARIOLOUS RASH.

Netolitzky (*Præger Medic. Wochenschrift*) records the case of an infant sixteen months old, who was seized with fever during the prevalence of an epidemic of scarlatina. On the second day of the sickness the whole surface of the body became covered with a smooth, red, scarlatinous rash, on the next day grayish, diphtheritic deposits appeared upon the swollen tonsils. Finally, on the fifth day, variolous nodules made their appearance.

The scarlatinal exanthem continued to progress side by side with the variolous eruption, and did not disappear until the twelfth day, when the pustules were dessicating. Fourteen days from the commencement of the illness, albuminuria, and œdema of the hands and feet were noticed; these symptoms continued until near the end of the fourth week.

The reporter questions whether the first rash was really scarlatinal, or merely a widely-extended prodromal exanthem of smallpox.—*Maladies De L'Enfance*, May, 1887.

PERSONAL DISINFECTION OF THE PATIENT IN SCARLET FEVER.

I. N. Love, in the *Weekly Medical Review*, March 2, 1887, strongly advocates personal as well as general disinfection in scarlatina. His method is to apply freely to the desquamating surfaces, carbolized olive oil and glycerine, afterwards sponging off with dilute listerine (1-12), or antiseptic cologne, containing one part of corrosive sublimate to two thousand of cologne; this is done each day.

In quite a number of instances, scarlatina has by this means, together with complete isolation, been confined to a single individual, notwithstanding the proximity of other members of the family who were susceptible, in that they had not previously had the disease.

In confirmation of his opinion, the author quotes Dr. F. C. Shattuck, who states:—

“From the moment that the disease is declared, the patient should be thoroughly anointed daily with carbolized vaseline, lard, or the like, and this should be kept up till desquamation has ceased. Not only is the comfort of the patient promoted, but the danger of the spread of the infection is thereby greatly lessened.”



## WARM BATHS IN MEASLES.

In one hundred cases of measles treated by warm baths there were eight deaths—three from intercurrent diphtheria, three from consecutive broncho-pneumonia, and two from the disease itself. These favorable results are believed to be due to the beneficial action of the baths during the fever.

As soon as the temperature reached  $100.5^{\circ}$  or  $101^{\circ}$  Fahr., the children received as many as six baths, at  $95^{\circ}$  to  $99.5^{\circ}$  Fahr., in the twenty-four hours; the duration of each bath being from eight to ten minutes. The patient was immersed up to the neck, and, in cases of somnolence and prostration, cold water was poured upon the head during the bath.

Abundant perspiration and greatly easier respiration followed, while the body temperature was notably decreased.—COHN, *L'Union Med. du Can.*, March, 1887.

## THE CONDITION OF THE LARYNX IN WHOOPING-COUGH.

Von Herff, while suffering from an attack of pertussis, made a series of examinations upon his own larynx. The results were as follows: Throughout the whole course of the illness a slight degree of inflammation of the mucous membrane of the respiratory tract was seen to exist, extending from the posterior nares to the bifurcation of the trachea. In the earlier stages this inflammation took the form of a slight catarrh, but during the spasmodic stage it was very intense and widespread, and only slowly disappeared during convalescence. The intensity of this inflammation varied in different parts of the respiratory tract. It was especially marked over the mucous membrane covering the arytenoid cartilages, and the cartilages of Santorini and Wrisberg, but was greatest over the posterior wall of the larynx, between the vocal cords, and on the under surfaces of the epiglottis. The other parts of the larynx remained unaffected, the vocal cords being quite intact. The hyperæmia extended into the trachea, and could be distinctly seen as far down as the bifurcation.

During every paroxysm a small mass of mucus could be seen lying on the posterior wall of the larynx, on a level with the glottis, and when this was removed the attack instantly ceased. When this part of the larynx was irritated by a sound, an attack of spasmodic coughing was produced, simulating in every way a spasm of whooping-cough. Irritation of the under surface of the epiglottis had a similar, though less marked, effect. On the other hand, stimulation of other parts of the larynx was entirely without effect in producing the characteristic paroxysms of coughing.

Irritation of the mucous membrane in the inter-arytenoid region seems to be especially connected with the characteristic spasms of whooping-cough.—*Medical Record*, March 5, 1887.



## ANTIPYRINE IN WHOOPING-COUGH.

Sonnenberger, after using antipyrine in seventy cases, claims excellent results.

When used in the initial stage it brought the attacks to a close, with mitigated symptoms, in from three to five weeks. When the treatment was not begun until later in the attack, the paroxysms were at once influenced for the better, the first indication of an improvement being a freer expectoration. This was quickly followed by general improvement and increased ability to retain food. In no instance was collapse produced. Complications occurred in five of the seventy cases; in two, pneumonia, and in three tuberculosis.

What the action of antipyrine may be cannot at present be positively affirmed. Sonnenberger seems to incline to the theory held by Binz, that the effect of the members of the chinolin group within the organism is anti-parasitic, as it is outside, and that we thus have an actual specific against whooping-cough. To this must be added a very remarkable sedative influence in certain irritable states of the nervous system.

Antipyrine may be given to children in doses of from one-quarter of a grain to three or five grains, according to the age. It is best administered in the form of powder, in sweetened water. It is not disagreeable to take, and has no bad effect upon the digestion. It may be continued for several weeks without ill results.—EDITORIAL, *Philadelphia Medical Times*, July 9, 1887.

## PEROXIDE OF HYDROGEN IN WHOOPING-COUGH.

Dr. Benjamin Ward Richardson, in *The Asclepiad*, No. 13, states that he has had excellent results from the use of peroxide of hydrogen in whooping-cough. It subdues the spasmodic paroxysms, checks the secretion in the throat, and shortens the duration of the malady, thereby lessening the dangers of sequelæ. The mode of prescription is—

R.	Hydrogen peroxide (10 vols. strength)	. . . . .	℥vj.
	Glycerine	. . . . .	℥iv.
	Distilled water, to	. . . . .	℥iij.

M.—One teaspoonful for a dose, to be taken in a wineglassful of water.

Where there is stridulous spasm with the cough, Dr. Richardson either substitutes two drachms of ozonic ether for the solution of the peroxide of hydrogen, or adds it to the above solution.—*Medical News*, March 19, 1887.

## SULPHUROUS ACID FUMIGATION IN WHOOPING-COUGH.

Dr. Mohn recommends this treatment as being most efficacious. His plan is to have the patient put into clean clothing and removed from the chamber to be used as a sick-room, in the morning. All the clothes and the toys to be subsequently used are brought into this



room, and then sulphur is burnt upon live coals in the centre of the apartment. In the evening the child is brought back. About one ounce of sulphur to every cubic metre of room-space, is the proper proportion for the fumigation. The belief is that the sulphurous acid generated, destroys all pathogenic spores lurking in the air, bedding, clothing, etc.—*London Medical Record*, February 15, 1887.

#### ANTIPYRINE IN CHOREA.

Wolluer (*Münchener Medic. Wochenschr.*, 1887, No. 5) reports the case of a girl of 16 years, who was afflicted with violent chorea, following an attack of articular rheumatism. Bromide of potassium, prophylamine, and salicylate of sodium were administered without beneficial effect.

The author then prescribed antipyrine in doses of three grains daily, and under its influence improvement was very rapid. The child was almost immediately able to sleep, and the choreic movements completely ceased at the end of twelve days.—*Maladies de L'Enfance*.

#### MANAGEMENT OF WEAK AND IMMATURE INFANTS.

In a lecture by Professor Tarnier, reported by Dr. Thomas Linn in the *Philadelphia Medical Times*, July 9, 1887, the above question is most interestingly discussed.

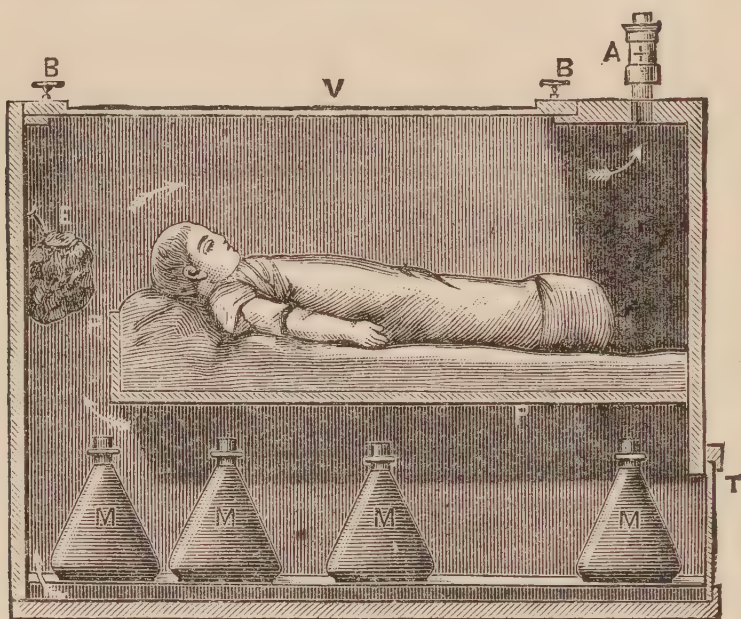
When premature expulsion of the foetus cannot be checked, children are born in a condition of feebleness requiring particular care. Such children are under weight, breathe and eat imperfectly; have ill-formed organs, and badly performed functions; their skin is soft and delicate, bright-red in color, and so transparent that the superficial bloodvessels can often be seen, and their cry is feeble. Their muscles are inert, they hardly seem to contract, and the movements of the limbs are rare and without vigor. The infant, plunged in a sort of torpor, has not even strength enough to suck, the muscles of the cheeks and of the tongue and palate being apparently too weak to perform this act, and deglutition itself is often slow,—a grave symptom, since the regular accomplishment of this function alone renders life possible.

The employment of artificial heat and a well-regulated alimentation are the methods of combating this condition. Warmth, and even temperature of the surrounding air are most important. The old method of accomplishing this was to envelop the infant's body and limbs, under the ordinary clothing, with a layer of cotton wadding, and place a fold of the same around the head. Two or three bottles filled with hot water were placed under the blankets of the bed, and renewed from time to time as they became cool. An effort was made to maintain the temperature of the chamber at 77° Fahr. All



changes of clothing were made before a brisk fire, and, two or three times every day, massage or friction, either dry or with various stimulating embrocations, was practiced to strengthen the circulation. As an improvement upon this crude and very unsuccessful method, M. Tarnier has devised an apparatus called a "hatching cradle." It consists of a box, made of wood, sixty-five centimetres long by fifty high and thirty-six wide, with sides twenty-five millimetres thick. The inside of the box is divided by a partial partition into two parts; this partition, which is horizontal, is placed about fifteen centimetres from the bottom. The lower story is intended for hot-water bottles, such as are called "monks" in Paris.

The wood-cut shows this apparatus.



There are two doors: one is a sliding door on the side of the box, to push to either side for the purpose of introducing the hot-water bottles; the other is at one of the ends (at *T* in this figure); it does not completely close the orifice, but allows air to enter. The upper part, for the baby, contains the bedding, and is covered with a glass top at *V*; it should close tightly and be held in position by two screws at *BB*. At *A* is an outlet for the air, to which a small ventilator can be attached. In the opening between the two chambers a wet sponge is placed to keep the air slightly moist, and here, also, a thermometer is placed to mark the temperature. The heat is supplied by the earthenware jugs at *M*; they contain a pint of water each; four or five are required to keep the temperature at the proper point,—87–90° Fahr. The chamber must be heated to this degree before the infant can be placed in it, and every one and a half or two hours one of the water bottles must be changed in order to maintain a constant temperature. The air passes in by the door at *T*, is heated by the bottles, and passing by the sponge, *E*, escapes at *A*; the movements of the small ven-



tilator in the latter position is the index that air is circulating. The infant must be dressed in swaddling clothes, as it has been observed that the temperature is always two or three degrees higher under the clothing than in the chamber itself. Every hour or two, according to the case, the little patient should be taken out to receive food and have its napkins changed. The shorter the time occupied in these processes the better.

The excellent results obtained by these cradles is shown by the following statistics obtained from the Maternité in Paris :

WEIGHT OF CHILD.*	NO. OF INFANTS.	NO. THAT LIVED.	NO. THAT DIED.
1000-1500 grammes.	40	12	28 or 70 per cent.
1501-2000    “	131	96	35 or 26.7 per cent.
2001-2500    “	112	101	11 or 9.8 per cent.

Before the introduction of the machine, infants died at the rate of 66 per cent. ; since, the average proportion is 36.6 per cent.

The heated cradle has also been used with success in the treatment of sclerema, œdema, and cyanosis, attacking the newly born.

*Alimentation.*—From the very first day an attempt must be made to put these feeble infants to the breast, and, if they be too weak to suck, the milk may be squeezed into the mouth, or first into a warm spoon and then given to the child. The mother’s or nurse’s milk, without dilution or addition, is the best food, though if this cannot be obtained asses milk may be used. This must be mixed with equal quantities of warmed sugar and water,—3 parts to 100. When cow’s milk is employed, the mixture should be one part to three of the same sugared water. M. Tarnier recommends that cow’s milk be prepared thus: The mixture of milk and sweetened water is placed in an air tight pot, and this is placed in boiling water for half an hour. It is given to the child from a small spoon. When the infant is very small six to eight grammes are enough for a meal; larger babies require from ten to fifteen grammes. There should be at least twelve meals every twenty-four hours.

It often happens that the babe will drink badly and throw up half the liquid given. Under this deficient feeding the little sufferer gets rapidly worse, loses weight, and frequently has diarrhœa. In these cases “gavage” is resorted to. The apparatus used is quite simple, being nothing more than a urethral catheter of red rubber (Nos. 14-16, French), at the open end a small glass funnel is adjusted. The infant upon whom gavage is to be practiced is placed on the knee, with its head slightly raised, the catheter, being wetted, is introduced as

\* The usual weight of an infant born at term is stated by the reporter to be from 3000 to 3500 grammes,—about 7 pounds.



far as the base of the tongue, whence, by the instinctive efforts at deglutition, it is carried as far as the œsophagus. Then the catheter is gently pushed down the œsophagus and into the stomach. The liquid food is next poured into the funnel, and by its weight soon finds a way into the stomach. After a few seconds the catheter must be removed, and here is the great point in the operation: *it must be removed with a rapid motion and at once*, for if it be withdrawn slowly all the food introduced will be vomited.

The number and quantity of the meals thus given must vary with the age and strength of the infant. As a rule, eight grammes of food every hour will suffice when the subject is small, but there must be an increase as circumstances require. Mother's milk is the best in gavage, but other foods may be used if it be impossible to obtain it.

Should the gavage be too copious the infant gains rapidly in weight and size. This increase, however, is due to œdema, and quickly disappears when a proper quantity of food is administered. When the excessive feeding is continued, indigestion soon sets in, and the patient dies of gastritis or enteritis.

So soon as the child gains strength, this mode of feeding may be alternated with nursing, and gradually breast feeding may be entirely substituted for it. Nevertheless the least digestive disturbance indicates the necessity of a return to gavage.

Even when the child is old enough to nurse, should it be weak, it is useful, outside of its regularly taking the breast, to resort to gavage three or four times a day. This is what M. Tarnier calls *gavage de renfort*, as it keeps up the strength of the infant so that it can take the breast and digest well.

The absence of the sensation of hunger and of the necessary strength to suck are not contra-indications to this mode of feeding, and by it, together with the use of hatching machines, the actual period of vitality has approached the legal period, which, in French law, is six months of intra-uterine life.

#### MAXIMUM DOSAGE FOR CHILDREN.

Buttin recommends the following proportions in prescribing for children: From one to two years, one-tenth the dose for adults; two to five years, three-twentieths; five to seven years, one-fifth; eight to ten years, one-third; eleven to thirteen years, one-half; fourteen to sixteen years, two-thirds; seventeen to nineteen years, three-fourths; and for the aged, sixty-five to eighty, four-fifths of an ordinary adult dose.—*Journal de Méd. de Paris*, April 10 1887.



## GENERAL MEDICINE.

UNDER THE CHARGE OF

J. C. WILSON, M.D.,

Physician to the Philadelphia and Jefferson Medical College Hospitals, etc.

### VALVULAR DISEASE OF THE HEART UNATTENDED BY SERIOUS SYMPTOMS.

Sir Andrew Clark in the course of an address delivered at the last meeting of the British Medical Association on "Valvular Disease of the Heart Known to have Existed for over Five Years without causing Serious Symptoms," lays down the following conditions as those which, assuming on the part of the patient obedience to properly adjusted rules of health, would justify us in permitting an individual presenting signs of valvular lesions, say, for example, mitral regurgitation, to continue the ordinary duties and enjoyments of life, in sustaining an application for life assurance, in sanctioning marriage, and in speaking favorably of his prospects of longevity:—

- a.* Good general health.
- b.* Just habits of living.
- c.* No exceptional liability to rheumatism or catarrhal affections.
- d.* Origin of the valvular lesion independently of degeneration.
- e.* Existence of the valvular lesion without change for over three years.
- f.* Sound ventricles of moderate frequency and general regularity of action.
- g.* Sound arteries with a normal amount of blood and tension in the smaller vessels.
- h.* Free course of blood through the cervical veins.
- i.* Freedom from pulmonary, hepatic, and renal congestion.

It must be added, as a matter of course, that the conditions of a favorable prognosis would differ for different valves and for each valve according to the character of the lesion.

He concludes his paper with the following propositions:—

1. There are many persons with long-standing valvular disease of the heart engaged in the active business of life, who without any symptoms of heart disorder, have enjoyed good health and reached an advanced age.

2. That the mitral regurgitant murmurs so often encountered in chorea, for the most part, disappear within eight or nine years of the attack.

3. That valvular inflammations and their effects, arising in the course of rheumatic fever, do sometimes disappear and leave behind no clinical evidence of their former existence; and that this occurring for the most part in the young, also occurs sometimes in the middle aged.



4. That the signs of valvular defects arising out of the degenerative changes of middle life, do also, on rare occasions, disappear, and that where circulating and respiratory disturbances accompany their commencement, they sometimes subside and permit of apparently complete readjustment.

5. That as there must be in the histories, habits, occupations, and surroundings of patients with valvular disease conditions which, in one case, bring about secondary disorders, and, in another case, confer immunity from them, it is desirable that the respective *differentialiæ* should be discovered and made capable of application to practice.

6. That any systematic and critical study of this subject likely to lead to practical issues could be undertaken only by collective investigation, and not by it without the active assistance of experienced general practitioners, who possess, in a special manner, the knowledge necessary to the end in view.

7. That a just inquiry of the kind proposed, conducted with due patience, discrimination, and accuracy, would greatly extend our knowledge of the material history of diseases of the heart, and largely increase our means of assisting those who suffer from them.

The above conclusions were deduced from no less than 683 cases of valvular lesions of the heart without definite cardiac symptoms, seen at Sir Andrew Clark's own house between 1873 and 1886. These cases are arranged in a consecutive series, and serve at once as a monument to the industry of a worker whose time is fully occupied and an example to others whose closed and neglected case-books contain mines of experience perhaps no less valuable to the profession. They illustrate the wide difference in the prognosis of valvular diseases in hospital and in private practice.

Of the 683 cases, 326 sought relief on account of symptoms referred to the digestive system; 134 for diseases of the nervous system; 61 for rheumatic affections; 47 for respiratory disorders; 60 for affections of the skin, and 23 for gout.

In the discussion and editorial comments called forth by this paper, certain facts that have been slowly becoming apparent were strongly emphasized:—

1. That any but the most moderate use of tea, coffee, tobacco, and alcohol, exerts a most unfavorable influence upon the innervation of the heart and upon its muscle-substance, and secondarily upon the prognosis of valvular lesions, and that of these substances, tobacco and alcohol are especially important.

2. That the state of chronic invalidism formerly enjoined upon persons suffering from valvular lesions with the view of diminishing the work of a deranged organ is not always necessary, but on the contrary



very often positively hurtful. Moderate muscular activity may be safely advised in a large number of the cases. To Oertel, of Munich, is due the credit of having shown the groundlessness of the fear of allowing a moderate amount of exercise. In truth exercise must be looked upon as a powerful therapeutic agent, and its use controlled and regulated as is that of active drugs. To carry out the rules laid down by Oertel would require constant medical supervision, such as can only be exercised in a medical institution. Under ordinary circumstances it may be safe to allow the patient to pursue his usual avocation, unless it be of an arduous kind, warning him against sudden and unduly prolonged muscular efforts. It is understood that not every person with damaged cardiac valves can do his customary work with impunity. When, as especially pointed out by Sir Andrew Clark, the heart is irritable, irregular, or frequently intermitting, when the murmurs vary in character or intensity, when there is evidence of progressive changes in the valves or in the muscular walls, and when there is any febrile disturbance, it is necessary that the patient be kept at rest and fed upon the lightest food.

3. That the primary physical signs of valvular lesions are much less important than the secondary morbid phenomena, murmurs than the evidences of deterioration of the heart muscle or disturbances of its innervation or lowered blood pressure in the arterial side and increased pressure in the reverse side of the vascular system. The words of W. S. Gairdner, written in 1861, are still true: "The tendency of half instructed auscultators is to over-estimate the importance of the murmur as a fact and to under-estimate it as a means of investigation; to pay too much attention to the mere existence of the sound and too little to the circumstance in which it occurs. And from this springs another tendency, which is, to take too great and sombre a view of cardiac murmurs generally, and especially of such as are loud and obtrusive." —*British Medical Journal*, February 19, 1887.

#### ON THE DISAPPEARANCE OF THE AORTIC REGURGITANT MURMUR.

Robert Saundby contributes notes of four cases of aortic incompetency, confirmed by *post-mortem* examination, in which the aortic diastolic murmur either disappeared under observation or was, for a period before death, inaudible. The disappearance of murmurs having their origin at the mitral orifice, is of not very infrequent occurrence, and in cases of positive valvular lesions, whether stenosis or incompetency, may be explained by failure of the muscular power of the heart, resulting in propulsion of the blood in currents too feeble to produce audible *fluid veins*. This explanation is fully borne out by the occasional recurrence of such murmurs coincidently with increased heart-power and the general improvement of the patient's strength.



The disappearance of aortic murmurs and especially of that of aortic incompetency must be very rare. Gairdner has alluded to it, and a case is recorded by Walsh. Both these observers accept the explanation that the disappearance is due to changes in the valve. In the cases reported by Saundby not only was aortic incompetence present without changes of the valves adequate to explain the disappearance of the murmurs, but there were also conditions indicating extreme enfeeblement of the ventricular walls. The heart was dilated in all of the four cases. In one there was "interstitial myocarditis;" in a second, the heart-wall was "pale and soft" and the pericardium was "universally adherent;" a third showed adherent pericardium, and the fourth "brown atrophy of the muscular fibres." In all these cases, furthermore, there was disease of the mitral valve. These conditions permitted only a feeble propulsion of the stream of blood into the aorta. Under such circumstances there would be a very feeble aortic recoil, and notably in cases where, as in the first of the series, the coats of this vessel were stiffened and weakened by atheroma. In short, the amount of reflux becomes so slight and the stream of regurgitant blood passes the incompetent valves under such low pressure that it is unable to determine an audible aortic murmur.—*Edinburgh Medical Journal*. February, 1887.

#### HEART STRAIN AND WEAK HEART.

Beverley Robinson, continuing the work done by DaCosta, McLean, Fraentzel, Peacock, Clifford Albutt, Myers, Fothergill, Austin Flint, and Delafield, in the important subject of the pathology of functional disturbances of the heart and the secondary changes to which such functional disturbances give rise, concludes an interesting, practical paper read before the Practitioners' Society of New York, with the following propositions:—

1. There is a class of cardiac diseases to which the names of "heart-strain," "heart over-strain," or "weak heart" may be properly given at the present time, and until this class has been more carefully subdivided.
2. In this class are now included cases in which there are no marked physical changes, and in which the symptoms alone indicate cardiac weakness.
3. In many cases the physical cardiac changes are more or less marked, and usually show some dilatation, joined or not with slight or moderate thickening of the ventricular walls, and accompanied or not with mitral or aortic incompetency.
4. There are cases in which the heart is obviously somewhat enlarged, although there never had been any morbid symptoms which showed cardiac weakness.



5. The causes of these affections are numerous. Among them, however, prolonged or excessive physical exertion is often, though not always prominent.

6. In some cases the disorder seems to be one more of neurosal than muscular deficiency, and may affect the functions of the pneumogastric, the sympathetic, or the intra-cardiac ganglia.

7. In several instances the causes of cardiac disorder are very obscure or wholly unknown, and in such instances we must admit the existence of a *weak heart* primarily, that is sometimes first recognized suddenly and without premonitory indications, which shall enable us to foretell such conditions of cardiac debility.

8. Absolute or relative repose, appropriate diet, change of scene, chalybeates, cardiac tonics, counter-irritation, etc., employed judiciously, will do much in most cases to restore real or apparent cardiac vigor for a shorter or a longer period.—*Medical Record*, Feb. 26, 1887.

#### PRIMARY TRICUSPID INSUFFICIENCY CAUSED BY VEGETATING ENDOCARDITIS.

Dr. Charles Malibran (*L'Union Médicale*, January 20, 1887) has placed upon record a case of primary endocarditis of the right heart in the adult with valvular lesions causing tricuspid incompetency. The case was that of a woman, aged 43, admitted to l'Hôtel Dieu, November, 1884, in the service of Professor G. Sée. The patient was anasarcaous and suffered from almost continual oppression with suffocative attacks and cardiac palpitation. These symptoms came on rather suddenly. Five years before she had had variola. There was no history of rheumatism. The urine was scanty, light-colored, and contained albumin in considerable quantity.

The physical signs relating to the heart were as follows: Upon palpation, great feebleness of impulse with difficulty in locating the apex with precision; no appreciable hypertrophy. Auscultation revealed at the apex a distinct *bruit de galop*; no aortic or mitral bruit; in fact, no evidence whatever of any valvular lesion on the left side of the heart. Examination of the right heart revealed at the ensiform cartilage a very distinct systolic souffle of some intensity but not harsh. The murmur was on account of its circumscribed character and the position of its maximum intensity regarded as due to tricuspid insufficiency.

*Post-mortem*.—Heart globular; apex formed almost wholly by the right ventricle, the walls of which were hypertrophied; no alteration of orifices or valves of the left side of the heart. On the right side very pronounced lesions; upon the leaflets of the tricuspid valve, which were much thickened and hypertrophied and insufficient, there were numerous vegetations. These changes were limited to the valve. Pulmonary artery normal. The kidneys presented the lesions of the interstitial nephritis.



The etiological relations of the endocarditis were not clear. Whether it was due to the changes initiated during the attack of variola or to the nephritis or to some other cause could not be determined.

Duroziez, in a later number of the same journal (*L'Union Médicale*, March 5, 1887), records a series of cases of tricuspid disease, both isolated and associated with valvular disease of the left heart, due to endocarditis of the right side of the heart. The opinion formerly held that the right heart always or nearly always escapes is no longer tenable. Bramwell (*American Journal Medical Sciences*, April, 1886) found in 685 cases examined *post-mortem*, 131 which presented some naked eye lesion of the valvular apparatus of the heart; of these 131 there were 44 or 33.58 per cent. in which the tricuspid was implicated; in 83 cases there was distinct evidence of old or recent endocarditis of the simple (non-ulcerative) form; and in these 83 cases the tricuspid was affected in 24 or 28.91 per cent.

On the other hand further observations are needed to confirm the extreme view taken by Bramwell as to the frequency of tricuspid lesions due to acute endocarditis.

#### ANEURISM OF THE AORTA AND ATHEROMA OF THE AORTA IN EARLY LIFE.

Dr. Sanné (*Rev. des Mal. de l'Enfance*, February, 1887) has reviewed the literature of these rare conditions, and added a case to the limited number thus far published. Aneurism of the aorta in children was among the rarest of pathological conditions noted in medical literature, when Roger, in 1863, exhibited to the Société Médicale des Hôpitaux in Paris, a child six years old, suffering with aneurism of the arch. Nor has the number of recorded cases greatly increased up to the present time. Of 551 cases of aneurism collected by Crisp, of London, there were five only in subjects under twenty years of age; of 98 cases of aneurism of the aorta a single case was under the age of twenty; of 59 cases of aneurism of the abdominal aorta only one was under twenty years of age. In the *Bulletin de Thérapeutique*, 1886 (p. 393), there is recorded an instance of aneurism of the abdominal aorta in a boy of fourteen. Finally, Broca mentions in his "Treatise on Aneurism," a case of aneurism in an infant one month old.

Sanné's case was that of a lad thirteen years old. The physical signs were those of aortic insufficiency and dilatation of the arch of the aorta. At the autopsy the following conditions were noted: A tumblerful of yellowish serum in the pericardiac sac; walls of left ventricle much thickened; transverse aorta dilated, its walls thinned; numerous patches of atheroma; at the convex superior portion an aneurismal sac the size of a hazel-nut, the orifice of communication being



partly closed by a mass of cretaceous material. The semilunar valvelets of the aorta were covered with collections of cretaceous material which rendered them insufficient and diminished the diameter of the ventricular-aortic outlet. Along with this case the author of the paper reprints three others, that of Roger, above-mentioned: a case of atheroma of the arch in an infant two years old (*Bull. de la Société Anatomique*, 1875, p. 775); and an instance of large aneurism of the abdominal aorta in a fœtus, observed by Dr. Phaenomenow (*Arch. für Gynækologie*, 1882).

**BOVINE TUBERCULOSIS; ITS COMMUNICATION BY INGESTION, INHALATION, AND HEREDITARY TRANSMISSION; ALSO ITS DANGERS TO THE PUBLIC HEALTH.**

M. D. Blaine sums up an elaborate paper on the above subject, read before the Section on Hygiene and Public Health in the New York Academy of Medicine, with the following etiological conclusions, which appear to him to be abundantly sustained by the facts thus far observed in regard to tuberculosis:—

1. In the bovine species the disease is inherited either from the male or female.
2. Tuberculosis is acquired by the inhalation of tuberculous substances.
3. Tuberculosis is acquired by the ingestion of the milk of tuberculous cows, when the disease has reached the stage of suppuration, or when there is a tuberculous affection of the milk-bag.
4. The disease may be acquired by the ingestion of the flesh of tuberculous animals.—*Medical Record*, January 15, 1887.

**PHOSPHATE OF LIME IN THE NIGHT-SWEATS OF PHTHISIS.**

Dr. Rebozy has lately published the results of his investigations in the treatment of the night-sweats of phthisis by phosphate of lime. There can be no doubt that this drug has a special effect on the secretions, although its mode of action is as yet wholly unknown. Phosphate of lime has the advantage of not being at all poisonous; it is easily administered, is well borne by the stomach, stimulates nutrition, and exerts a favorable influence upon the tendency to diarrhœa.—*British Medical Journal*, March 26, 1887.

**THE TREATMENT OF PHTHISIS BY MEDICATED GASEOUS ENEMATA.**

The enthusiasm excited in the matter of the new treatment of consumption by the communications of Bergeon and later of Cornil last year, has already almost spent itself. The premature indorsement of the method by Dr. J. Henry Bennett, and the unfortunate announcement of the investigations at the Philadelphia Hospital, through the medium of the public press, aroused sudden and intense interest both in the profession and among the people on both sides of the Atlantic. A



method of treatment, as yet imperfectly studied, was at once hailed and proclaimed as the long-sought cure. The patients were on every side. The old methods of treatment had been one after another tried and found wanting. The treatment by medicated gaseous enemata, based upon established physiological and pathological facts, fulfilling the requirements of the germ theory, a specific in the true sense, as acting directly upon the cause of the disease, shown by Bergeon to have been successful in a very large proportion of the cases so treated during a period of two years, could not fail to arouse widespread and fervid hopes. Its general application to all sorts and conditions of patients, by doctors of every degree of skill and learning at once followed. The journals teemed with reports of cases,—at first successful cases, next with reports of questionable results, before very long of failures. As the results were not uniform, methods were criticised and modifications suggested. After a time reports came from this hospital and that, from one practitioner and another, that the trial had ended in disappointment and the method had been abandoned. To the physician, in a therapeutic inquiry, disappointment is little. In a way it is a gain. A negative result is an addition to the sum of positive knowledge. But to the hosts of patients and their friends, whose hopes were buoyed up by the false promises of an untried method, the disappointment of failure has meant abandonment to despair. Better, far better for them to have been left as they were. The reaction from the wild and unreasoning enthusiasm, which the method of Bergeon at first excited, was inevitable. It is the history of all popular crazes. But of the method itself it cannot yet be said to have been fairly tried. Still less can it be said to be wholly useless. It is true that the bacillus has survived the treatment in the cases showing the greatest improvement, and Trudeau has shown by culture experiments that the vitality alike of the bacillus and of the pus forming micro-organisms is unimpaired by the carbon dioxide passed through sulphur solutions acting directly upon them in far greater concentration than in any manner possible in the human organism. In so far as the treatment rests upon the germicide action of those agents, it is baseless. But it is a question of the seed and the soil. It may yet be shown that the influence of the gas upon the tissues is such as to increase their resistance to the ravages of certain parasites, to infertilize them to some extent at least to these particular germs. The results have been, according to some reports, sufficiently favorable to render this probable. Certain it is that in a very important percentage of the cases, the general symptoms have been, for a time, at least, distinctly improved. Whether or not this improvement has been partly or wholly due to associated causes, to expectant attention or other favorable psychical influences, or has been in some patients a phase of the



natural history of the particular case, cannot at present be affirmed. What is needed is calm, deliberate investigation on a large scale, conducted methodically through a series of years, upon cases arranged in groups according to their symptoms and history, with control investigations by means of other therapeutic methods and laboratory researches. The subject is of sufficient importance to warrant such studies, and the ultimate place of Bergeon's method can only be fixed in this way.

ON THE RELATION OF ACUTE GENERAL TUBERCULOSIS TO OLD LOCALIZED TUBERCULOUS LESIONS.

Jaccoud has, in connection with a very interesting case of general tuberculosis, reviewed the proofs of this relationship, recognized since 1867 and now so abundantly demonstrated. These proofs are of three distinct orders :—

First, Experimentation. All experimental researches since Villemin's famous experiments upon the inoculability of tuberculosis, wherever and under what circumstances soever conducted, have yielded confirmative results, whether the inoculations have been made with tuberculous matter itself or with its caseous products. The two materials must be placed in the same rank as regards their inoculability, and their unity of origin is thus demonstrated. Such inoculations have invariably determined the development of a tuberculous process, at first local, and after a more or less prolonged period, in almost all cases general (*granulation miliaire généralisée*).

The second order of proofs invoked by Jaccoud are derived from the physical or anatomico-pathological conditions of the lesions themselves. In all cases of general tuberculosis there may be found an old local tuberculous or caseous lesion, which has been the point of departure of the acute process. It is occasionally missed because it has not been searched for with sufficient care. Indeed, the variability of the seat of these lesions renders it an easy matter to overlook them. A Swedish physician published an account of a man aged 35, who died of acute tuberculosis, after a very brief illness, and in whom an old tuberculous lesion was discovered in the pelvis of one of the kidneys, no other tuberculous deposit being found in any part of the body. In a girl aged 17, who died of acute tuberculosis after an illness of twenty days, the only old lesions were found in double caseous salpingitis. In a man of 28, the old lesions consisted in caseous deposits in the epididymis, extending along the ureter to the kidney. A sufficiently large number of cases have been reported in which the old lesion has its seat in the articulations. Finally, we must regard caseating products in the pleural sac as a frequent starting point of general tuberculosis.

The third order of proofs is obtained by microscopical examination. During the time that this examination bore merely upon the



structure of the lesions, which exhibited changes according to their age, etc., they were grouped together, and their various forms were considered as different stages of one and the same morbid process. The discovery of the tubercle bacillus, and the demonstration of this specific micro-organism, alike in old tuberculous and caseous deposits, and in recent granulations, has settled the question in favor of the view that these diverse lesions are of the same nature and of common origin.

When the old local lesion is seated in the lungs, secondary infection takes place by the lymphatic and the pulmonary veins. Several observers have noted in such cases tuberculous changes in the walls of the vessels. Tuberculosis of the internal wall of the vessels may become of itself a source of infection for every region of the organism. If the old lesion be abdominal the process is the same, save that in addition to the veins the thoracic duct may become the means of the transportation of the bacilli.

Every individual who is the subject of a local tuberculous lesion, the sequel of enteric fever, of measles, of whooping-cough, or of any scrofulous process, whatever may be its seat or its duration, is exposed at any moment, under the influence of any cause capable of lighting up the smouldering fire, to the danger of a general tuberculosis which may be rapidly fatal. It is only in those fortunate cases in which the local tuberculous lesion undergoes calcification, and no longer contains the bacilli, that this danger is averted.—*Gazette des Hôpitaux*, January 1, 1887.

#### OIL OF SANDAL-WOOD IN THE TREATMENT OF FETID BRONCHITIS.

DaCosta, in a clinical lecture published in the *Philadelphia Medical Times*, April 2, 1887, calls attention to the value of oil of santal in the treatment of bronchitis of various forms, and especially in those cases characterized by fetor. The case which forms the text of this lecture was that of a man 32 years of age, who had been under treatment for some months for persistent cough with profuse expectoration, purulent in character, containing nummular masses and occasionally admixed with blood. The microscope showed no bacilli nor elastic tissue. The physical signs were those of bronchitis with localized dullness on the left side posteriorly about the middle of the lung. There was slight elevation of temperature ( $100^{\circ}$  Fahr.), great constitutional disturbance, decided emaciation, night sweats, frontal headache, diarrhœa, and vomiting. Abscess of the lung was suspected. Carbolic acid, terebene, and other antiseptic agents were tried without effect. Finally, oil of santal was administered in doses of five minims, at first three times, afterwards five times daily with the result of reducing the expectoration to a fluid-drachm in twenty-four hours, doing away with the fetor wholly, causing the râles to disappear, and bringing about



almost complete restoration to health. DaCosta has used this remedy in a number of cases with the same satisfactory results, and calls attention to its decided action upon the mucous membrane of the bronchial tubes as not less beneficial than upon that of the mucous membrane of the genito-urinary tract.

#### THE TREATMENT OF ASTHMA.

Lazarus concludes an important study of this subject with the following propositions:—

1. The prophylaxis of bronchial asthma must be based upon careful investigations of hereditary and constitutional conditions, especially those affecting the nose, throat, and chest.

2. The asthmatic attack, as such, should be relieved as quickly as possible.

Potassium iodide with chloral in large doses, once or twice repeated, is most effectual.

In certain cases operative treatment of the nose and throat is recommended.

3. The treatment of the sequelæ of the attack (bronchitis, emphysema) is very important, since these conditions predispose to the recurrence of asthma.

In general the pneumatic cabinet constitutes the most efficient means of treatment; for the chronic catarrh potassium iodide, with the occasional substitution of terpin-hydrate, is indicated.—*Berl. Klin. Woch.*, February 14, 1887.

#### CYCLIC ALBUMINURIA.

Klemperer, of Berlin, has recently added to the list of cases of cyclic albuminuria a carefully studied example of great interest. As the result of his own investigations and the consideration of the cases reported by Pavy, von Noorden, and Bull, of Christiania, he formulates the following conclusions in regard to the affection:—

Cyclic albuminuria is to be regarded as a well-characterized substantive disease. It chiefly affects young persons: the male sex is apparently much more liable than the female. With the exception of a certain degree of anæmia and a tendency to leanness, the patients present no special symptoms. The ordinary symptoms of Bright's disease are wholly absent. The patients are commonly neurotic (neurasthenic) individuals. They complain of vague disturbances of health, and usually of symptoms of derangement of the nervous system, as headache, weakness in the back, lassitude, disquiet, loss of energy, and an indisposition to bodily or mental effort. Derangements of the stomach, as loss of appetite, eructations, and sensations of weight and distention after taking food, are often prominent among the symptoms.



The conspicuous symptom is the presence of albumin in the urine, a fact often detected incidentally during the routine examinations of life insurance and military physicians.

The vague symptoms of neurasthenia often lead to investigations of the urine which, repeated from time to time, reveal the occasional presence of albumin, and upon methodical study its curious diurnal relations. The entire absence of albumin in the urine passed at night is common to all the recorded cases. In the course of the day the amount of albumin undergoes variations which appear to correspond in each particular case to certain laws, which are, however, so far as can as yet be determined, by no means constant for different cases. In Pavy's cases the albumin slowly increased from its first appearance, early in the day, to a maximum attained between 2 and 6 P.M., and then rapidly disappeared, so that in the evening the urine was quite free. Likewise in von Noorden's case, the quantity rose gradually from zero to the maximum, which was attained in the forenoon and fell again to zero. In Bull's case the maximum was reached at 5 P.M. In Klemperer's case two maxima, one in the forenoon, the other in the evening, were observed, and the variations in the amount of albumin, when not influenced by external agencies, conformed to the established cycle with remarkable regularity. The researches of von Noorden, Bull, and Klemperer have positively established the fact that neither the hours at which food is taken, nor its composition, have any striking influence upon the albuminuria. On the other hand, muscular effort is of the greatest importance, as shown by the fact that absolute rest causes the complete disappearance of albumin. But prolonged effort does not always cause its appearance, as is shown by the fact that both in the cases of von Noorden and that of Klemperer the urine often remained quite free from albumin after very long walks.

The influence of mental states, whether of depression or exaltation, has not been sufficiently studied; but prolonged or severe intellectual application, caused, in Klemperer's case, a positive increase in the amount of albumin.

It would appear that improved nutrition exerts a favorable influence upon the albuminuria. With increasing strength and weight and better health, there is found a decrease in the quantity of albumin. The diagnosis of cyclic albuminuria may be positively determined by the systematic examination of the urine for a few days. If the urine, otherwise normal, contains in the morning no albumin, and during the course of the day shows it in amounts regularly increasing and decreasing, and these conditions recur from day to day, the disease is present. The disappearance of the albumin, when the patient remains the greater part of the day in bed, is characteristic.

The accidental discovery of cyclic albuminuria in neurasthenia is



without special influence upon the course and treatment of the latter condition. The course of cyclic albuminuria is, so far as we at present know, always chronic. Twice has Pavy observed spontaneous recovery. Notwithstanding its long duration, this form of albuminuria seems to be unattended with danger to life. It does not result in serious disease of the kidneys, and may be compatible with ordinarily good health. Great diminution in the maximum diurnal amount of albumin occasionally occurs; in other cases the disease remains stationary for years, without in any way interfering with the comfort of the patient. All things considered the prognosis is good.—*Zeit.f. Klin. Med.*, 12 Band, I and II Heft., 1887.

#### ON SOME FORMS OF ALBUMINURIA NOT DANGEROUS TO LIFE.

Dr. Grainger Stewart devotes a valuable paper in the *American Journal of the Medical Sciences*, January, 1887, to the consideration of some of the forms of non-dangerous albuminuria. Setting aside for the present: (1) Albuminurias due to the presence in the urine of blood, pus, spermatic or prostatic fluid, which are sometimes called accidental albuminuria; (2) albuminuria due to the infective processes and high temperature, such as is often seen in pneumonia, erysipelas, diphtheria, and the specific fevers; (3) albuminurias associated with various nervous disorders, such as exophthalmic goitre, epilepsy and apoplexy; (4) the albuminuria so often induced by cold sea-bathing, and finally (5) the form due to passive congestion from cardiac disease or vascular obstruction, he defines four categories which may be distinguished with advantage. These are (*a*) paroxysmal albuminuria; (*b*) dietetic albuminuria; (*c*) albuminuria from muscular exertion; and (*d*) simple, persistent albuminuria.

1. *Paroxysmal Albuminuria*.—This form stands in interesting relation to paroxysmal hæmaturia or hæmoglobinuria. The patient, in the intervals between the paroxysms, may appear to be in good health. The attack begins with a slight feeling of chilliness or a rigor, attended by uneasiness in the region of the liver and in the small of the back. The urine is of a dark color, due to the presence of blood pigment. As a rule, the color is simply due to hæmoglobin, but sometimes blood corpuscles may be detected in the freshly-passed urine. A single act of micturition may discharge all the hæmoglobin which has been set free, or it may appear during two or three micturitions. The essential characteristic of this group of cases is the sudden and copious appearance of albumin, which passes away very quickly, but recurs at intervals with or without an appreciable exciting cause. The author considers that some change in the blood, causes an alteration in the kidneys. As a means of treatment he advises ammonium chloride, administered with due regard to the avoidance of renal irritation.



2. *Dietetic Albuminuria.*—In some of these cases the presence of albumin in the urine is determined by certain kinds of food; in others, it occurs during the digestion of any kind of food. In a third group of cases, either one or the other of the above causes will bring it on in association with other influences, such as exercise or time of day. In this form no tube-casts are found in the urine. It is suggested that some chemical change takes place in the albumin of the blood, or that possibly some reflex vascular influence is at work. But at present no satisfactory explanation of these causes can be given. Treatment consists in a carefully regulated diet and strict attention to hygienic laws. Ammonium chloride and arsenic may prove eminently serviceable.

3. *Albuminuria Following Upon Muscular Exertion.*—An extremely interesting example of this variety is given by the author of the paper. A girl of 13 was found to have albumin in her urine, and was thought to have Bright's disease, but the examination of different specimens of the urine showed that albumin was absent on rising in the morning and during the night. A sample passed forty-five minutes after getting out of bed in the morning, and, as a rule, every sample of urine passed during the day, while the patient was up and about, contained albumin, but the quantity diminished towards evening. In this case it seems that the moment the patient assumes the standing position, albumin appears in the urine. Rest in bed during the daytime, did not cause the albumin to wholly disappear, but diminished it to such a degree that it was scarcely perceptible. From the peculiar circumstances in which the albuminuria appeared in this case, the author considered that the patient would grow out of the affection in the course of a few years, provided the diet was duly regulated and his strength not overtaxed. Such remedies as ergot and belladonna, which act upon the muscular fibres of the blood-vessels, should be extensively tried.

4. *Simple and Persistent Albuminuria.*—These cases are rare, and are difficult to diagnosticate from examples of slight chronic organic disease of the kidneys. No tube-casts can be found, but the urine always contains more or less albumin, the amount of which is not influenced in any way by diet or exercise. There is no increase of vascular tension and no cardiac hypertrophy. Sometimes these cases develop into chronic Bright's disease and terminate fatally. A hopeful prognosis may, however, be given, where, as is commonly the case, there are no changes in the vascular system, the average quantity of urea is not diminished, and no casts are found in the urine.



## DISEASES OF THE MIND AND NERVOUS SYSTEM.

UNDER THE CHARGE OF

**CHARLES K. MILLS, M.D.,**

Professor of Diseases of the Mind and Nervous System in the Philadelphia Polyclinic and College for Graduates in Medicine,

AND

**JAMES HENDRIE LLOYD, M.D.,**

Instructor in Electro-Therapeutics in the University of Pennsylvania.

### PARTIAL RESPONSIBILITY OF THE INSANE.

Professor Ball, discussing the question of the partial responsibility of the insane, observes that after a long struggle the protection of the insane from criminal responsibility has now gained its natural limits, if these limits have not been overpassed. There is no question that the lunatic who imagines that his body is made of glass is decidedly insane; but if he murders a man whom he has good reason to wish out of the way, taking artful and well-planned precautions, it is clear that he has reasoned in the same way as ordinary criminals, and deserves to suffer the consequences of his acts. If, on the contrary, the crime seems to flow as a natural consequence from his delusion, he ought not to be rendered criminally responsible.—*Annal. Méd. Psychologiques*.

Dr. W. G. Ireland, in speaking of the same subject in reference to the English laws, in which partial responsibility on account of insanity is unknown, says, "that while he sees the force of Dr. Ball's arguments in holding certain deranged persons to be responsible to law, he does not see how they prove the advisability of making them partially responsible, if such partial responsibility is to diminish the severity of the punishment, as it will not be insisted that a less severe punishment than is meted out to sane culprits will be sufficient to deter lunatics from crimes. In some cases, at least, one may reasonably hold that, to deter them, a more striking punishment would require to be threatened. The view that some lunatics should be held partially responsible has been supported in England by Dr. Yellowlees, and, as long as the question is discussed on abstract grounds, his reasons seem to be strong enough; but the moment the principle is applied to a particular instance, the difficulty appears."—*London Medical Record*, February 15, 1887.

### DOSIMETRIC TREATMENT OF MELANCHOLIA.

Dr. Burggraeve, of Belgium, reports a case of hypochondriacal melancholia with suicidal inclinations, treated successfully by the dosimetric method, as follows:—

1. Every morning Seidlitz-Chanteaud, and every other day podophyllin, four granules. Valerianate of atropine, one granule in the evening, on going to bed.



2. Before each of the principal meals, quassine and arseniate of soda, four granules of each.

3. Every evening arseniate of strychnine, aconitine, and digitaline, four granules of each.

In the course of a few days the patient improved remarkably, and was completely restored.—*Répertoire Universel de Médecine Dosimét.*, and *Jour. of Med. and Dosim. Ther.*, March, 1887.

#### CEREBRAL LOCALIZATION.

A few interesting and valuable contributions have been made to the subject of cerebral localization during the current year. Among the most valuable of these is one by Henry Hun, M.D., of Albany (*American Journal of the Medical Sciences*, January 18, 1877), entitled a "Clinical Study of Cerebral Localization," illustrated by seven cases; an address by Exner on "Cerebral Localizations" (*Weekly Medical Review*, January, 1887), delivered at the meeting of the Imperial Royal Society of Physicians, held at Vienna, November 16, 1886; a contribution to the "Pathology of the Cerebellum" (*Medical Record*, March 5, 1887), by Dr. E. C. Seguin; and an admirable scientific and practical paper by Victor Horsley, on "Cerebral Topographical Diagnosis" (*American Journal of the Medical Sciences*, April, 1887). Several of the cases reported by Hun are of extreme interest, particularly the first, a case in which a blindness limited to the lower left quadrant of the field of vision of the left eye was undoubtedly due to a lesion which destroyed the lower half of the right cuneus. Such a case has never before been reported. Hun concludes his paper with twenty-four conclusions, some of them in accord with the conclusions drawn by others on similar studies.

Exner, in his address, contended that the centres of the different functions are not isolated but inter-connected in the cerebrum. Seguin gives a detailed account of one case of disease of the cerebellum with specimens, gross and microscopic; and three other cases of cerebellar disease were briefly presented. One of the most important conclusions from the study of these cases is, that tumors of the cerebellum present very variable symptoms, but one symptom, viz., cerebellar titubation, is, as was claimed by Nothnagel, pathognomonic of a destructive lesion of the middle lobe of the cerebellum, more especially its caudo-ventral masses. In Dr. Seguin's cases, optic neuritis or atrophy had not failed, which was in marked contrast to his experience with tumors in the cerebral hemispheres. Vomiting was a frequent symptom; occipital headache, and rigidity of the muscles of the back of the head were less frequent, but very valuable symptoms. Horsley's paper deals practically with the application of cerebral localization to cranial surgery, giving the results of experiment, observation, and experience.



## MENINGITIS.

Dr. J. P. Skeer describes what he regards as a new pathognomonic symptom of tubercular meningitis. The symptom is a small circle which forms in the iris near to and completely surrounding the pupillary margin. When it begins to appear it is very indistinct and resembles a wreath of thin, white clouds, the edge of which extends at first to the free border of the iris. In from twelve to thirty-six hours the whole margin of the iris will be involved, having become of a whitish or yellowish-brown color, and appearing irregular, thickened, and somewhat granular. These changes which commence in both eyes simultaneously, are more apparent in the irides of a brown color. The paper was read before the Chicago Pathological Society, July 26, 1886, and referred to a committee which reported that whatever may ultimately prove to be the value of the symptom, we are justified in regarding it as a strictly original observation, which may be termed "Skeer's symptom," until a name is found which expresses its pathological relations.—*Chicago Medical Journal*, January, 1887.

Dr. J. L. Lauschkemann says, that besides the epidemic spinal meningitis, which is infectious, there exists another rare variety of the malady whose characteristic is that it is not contagious. He gives the case of a girl eighteen years of age who was attacked suddenly with a violent chill, followed by a very severe headache, vomiting, and intense lassitude. When admitted to the hospital the patient was in a state of considerable excitement, she held her head in her hands and uttered continued cries. There was no delirium, but her countenance had an expression of intense suffering. The region in or near the nape of the neck was very painful, and the least pressure caused great pain. There was considerable radiation of the pain along the muscles of the back and trunk. The entire spine was very painful. In order to get some relief the patient laid on her stomach with her extremities against the foot of the bed, and her head thrown back in such a manner that the spinal column was in a concave form. There was facial paresis on the right. Her pupils were moderately dilated; did not react. The tongue was dry, the pulse feeble but irregular. The cutaneous hyperæsthesia was intense. The red lines of Trousseau appeared and persisted for a long time. There was diminution of the reflexes. The stomach was swollen.

In seven days the symptoms had completely abated and the general state was satisfactory. But in the evening the patient's temperature rose to 39° Fahr., and she had a return of the symptoms which were present at the beginning of the malady. Her convalescence was finally established firmly. In a fortnight after, four remissions followed, each time by an exaggeration of the morbid symptoms.—*Pesther Med. Chir. Presse*.



Dr. Henoch has described a form of simple, non-tubercular meningitis, characterized by a protracted course, and by alterations of exacerbation and improvement. The onset is sudden, the fever being more or less intense, with frontal headache, sometimes vomiting, and always marked rigidity of the muscles at the back of the neck, which may sometimes affect the muscles of one or other side. The fever abates, and improvement occurs after one and a-half to two weeks, to be followed by renewed exacerbation after an interval varying from twenty-four hours to several days without any apparent cause. These variations may be repeated frequently in the course of the next few weeks, cure resulting in from seven to ten weeks. Cases in which the remissions are not marked usually end fatally, especially when they occur during the first year of life.—*Centralbl. f. Klin. Med.*, February 5, 1887.

W. H. Day, M.D., has published a paper in which he draws a distinction between the symptoms of simple cerebral irritation, and those of slight congestion. He has observed marked symptoms of cerebral irritation in the children of neurotic parents. Dr. Day gives notes of cases in which distinct cerebral symptoms, combined with fever, were diagnosed early, and checked by appropriate remedies. Cold sponging was found to be the best means of lowering the temperature. In some of the cases, in which the rise of temperature was most marked, the best results were obtained.—*British Medical Journal*, February 5, 1887.

#### HYSTERIA.

Our French *confrères* are still active in their investigations of hysteria. Ch. Frere reports a case of hysterical paraplegia following a dream in a girl fourteen years of age. In reporting the case, he speaks of the fact that when provoking among hypnotizable subjects dreams, during the course of natural sleep, analogous pareses were determined.—*Le Praticien*, Jan. 10, 1887.

*New Observations on Male Hysteria Multiply.*—Charcot, in a lecture reported by Babinski and Berbet discusses two cases of hysterotraumatic paralysis in men. The most interesting of these is a case of hysterotraumatic paraplegia from being thrown out of a wagon. The patient gave an entirely different account of the accident from that which was given by a trustworthy bystander. He had grave hysterical attacks, and became paraplegic. For a long time he remained in a condition of hysterical coma or stupor. Severe headache, permanent hyperæsthesia of the head, dreams, tinnitus, and epistaxis were the prominent symptoms. He had some left hemispasm of the face with no deviation of the tongue. In the lower limbs the voluntary movements were very feeble. A condition of flaccidity was present, and also a condition like that present in true spasmodic paralysis. Neither



the bladder nor rectum was paralyzed. Remarkable disorders of sensibility were present. Anæsthesia of the pharynx was absolute; taste and smell were lost; hearing on both sides was blunted, concentric limitation of the visual field both on the right and left side was pronounced. The anæsthesia of the lower portion of the trunk and lower limbs was very marked, and included both the skin and the deep parts. Vigorous movements of the joints produced no pain, not even any sensation. With his eyes closed, the patient was absolutely ignorant of the attitudes imposed upon his legs. Sensation was lost to touch, pain, heat, and cold. According to Charcot, the delimitation of the anæsthesia reproduced exactly that which is observed in a hypnotized, hysterical, hemi-anæsthetic patient.—*Le Prog. Méd.*, January 22, 1887.

Rabinski has a lengthy article on "Muscular Atrophy in Hysterical Paralysis" in the *Archives de Neurologie* for July, designed to show that trophic disorders, especially muscular atrophy, can depend on hysteria. Muscular wasting from disuse is sometimes observed in hysterical cases, but it seems to us that our French friends may go too far in attributing genuine trophic disorders, scarcely to be distinguished from organic atrophy, to hysteria.

Charcot reports a case of unilateral hysterical, glosso-labial spasm, and gives the points of difference between capsular hemiplegia and hysterical hemiplegia.—*La Semaine Méd.*, February 2, 1887.

Dr. Moricourt reports a case of hysteria in a man with contracture of the left upper limb of traumatic origin of four months and a half duration, in which a rapid cure was effected by the use of copper internally and externally.—*Gaz. des Hôpitaux*, January 13, 1887.

E. Brissau and P. Marie report two interesting cases of deviation of the face in hysterical hemiplegia. The patients were both men, and presented paresis of the limbs with deviations of the face and tongue. Careful details as to the exact conditions are given, with pictures of the patients. In one of the cases sickness came on after falls. The deviation of the tongue and face was due solely to spasm. Twitchings were also present. In one case the deviation of the mouth was in the side opposite to the paralysis of the limbs; in the other the deviation was in the same side as the paralysis of the limbs. Another difference was that in one case one-half of the upper lip was a prey to the spasm; and in the other one-half of the lower lip. In the second case the deviation of the tongue was excessive, which seems to be a constant condition in hysterical hemiplegia. The authors refer to other similar observations by Talkoff, Helot, Thomson, Charcot, and Brodie. The following conclusions are drawn:—

In hysterical hemiplegia there may exist an analogous deviation of the face to that observed in facial hemiplegia or organic hemi-



plegias. This deviation of the face is distinguished by the following characteristics :—

The state of the spasmodic contraction of the muscles on one side of the mouth, bearing almost exclusively on one lip, the upper or the lower, and accompanied by very accentuated general twitchings. In the act of whistling there is a blowing out of the air not on the side supposed to be paralyzed, but on that where the spasmodic contraction co-exists.

The excessive deviation of the tongue causes this organ to take the most bizarre positions; this deviation takes place on the side where the spasmodic contraction exists, and shows itself more often even when the tongue is not drawn out from the mouth, and this can be seen by simply opening the mouth.—*Le Prog. Méd.*, No. 25.

#### EPILEPSY.

H. Bennett and Pearce Gould detail a very interesting case of epilepsy, caused by head injury in a boy six years old, which was, after many years, cured by trephining. He had a movable scar in the right parietal region. Slight pressure on this always was accompanied by the sensation of a red light passing before the eyes, and was followed by a loss of consciousness for a few seconds.

Dr. Gould trephined the skull at the seat of the cicatrix. The bone taken away as well as the dura mater was normal, and nothing abnormal was found within the skull. Dr. Gould closed the wound, and at the end of eight days it was healthy and had commenced to heal. After the trephining the patient had no attacks and soon was able to work.—*La Sem. Méd.*, January, 1887, from *British Medical Journal*.

Herr Rush, of Fritslar recommends calabar bean in epilepsy. He records some successful cases in the *Deutsche Med. Zeitung*.—*Am. Med. Dig.*, January 15, 1887.

#### RECENT INVESTIGATIONS OF THE KNEE-JERK.

Westphal has contributed a new and valuable paper on duration of the knee reflex in degeneration of the posterior columns of the cord. He gives two cases which presented complicated symptoms of tabes dorsalis in which the knee-jerk disappeared for the first time shortly before death. In both cases the chief lesion was degeneration in the posterior columns of varying extent and intensity at different heights. In one case irregular degeneration of the lateral and anterior columns was present. He concludes that generally when the knee-jerk had entirely disappeared a certain time before death, a particular part of the posterior columns had become involved.—*Arch. f. Psych.*, etc., xvii., S. 547, and *Glasgow Med. Journ.*, January, 1887.



Dr. Warren P. Lombard describes a new method of testing knee-kick, and also a method of recording the phenomenon.

Let the patient lie on his side, the leg to be examined being uppermost. Place a cushion or roll of cloth between the thighs, so as to separate the knees, and, as far as possible, to fix the thigh of the limb to be studied. Support the foot of the leg to be examined by a sling formed of a loop of bandage, or of a towel suspended from a cord. Grasp the cord as far from the foot as may be, letting the hand be directly over the ankle, that the leg may swing freely and the degree of flexion of the knee be determined entirely by the flexion of the muscles. Strike the ligamentum patella with an instrument which has a rounded edge, and which is considerable heavier than the ordinary percussion hammer.—*New York Medical Journal*, January 29, 1887.

A simple instrument for the diagnostic measurement of the knee-phenomenon is described as follows: It consists essentially of a quadrant, hollowed out so that its surface may correspond to a circle with a radius of seventy-five centimetres. A slip of paper can be fixed on this curve and held in place by a brass clamp; to the patient's leg, hanging at right angles over a table, a wooden rod, to the end of which an elastic brush pencil is affixed, is fastened by means of leather straps bearing a ring, through which the rod passes; the one strap is at the level of the condylus externus tibiæ, the other at the malleolus externus. The rod is so focused that, beginning at the zero of the quadrant, it will, with the radius of seventy-five centimetres, always touch the surface of the circle; the pencil is, by means of a pipette, moistened with a solution of eosine or other dye, and many trials can be made with the same slip of paper, as the color can easily be wiped off.

Sixty patients were measured in this way, the object being, firstly, to fix the *normal size* of the knee-phenomenon. It was found that the strength of the stroke given to the patella tendon did not cause a proportional increase or decrease of the excursion of the foot. It was settled by the experiments that physiological latitude of this excursion varied from 15 to 30° Fahr. The pencil does not describe a straight line on the surface of the cylinder, but an elliptical curve. This is thought to be brought about by a combined movement of extension, abduction, and adduction, so that other muscles, all innervated from the plexus cruralis participate in the causation of the phenomenon.—*Berlin Klin. Woch.*, and *Edinburgh Medical Journal*, February, 1887.

Dr. Lester Curtis read a paper on the absence of the patella tendon reflex, before the Chicago Medical Society, November, 1886. He mentioned the cases of a number of persons in apparently good health in whom the knee-jerk cannot be elicited. He was inclined to question its absence as an important sign of nervous diseases. In an interesting dis-

cussion on the paper, Dr. Curtis was supported by some, but opposed by more of those taking part. The fact was brought out strongly that careful methods of eliciting the knee phenomena were not always employed. Attention was called to the researches of Jendrassik, and of Weir Mitchell and Morris Lewis, on the effects of increased muscular tension when attempting to elicit the knee-jerk. Dr. H. M. Moir thought the best method of eliciting the knee-jerk was with a small hammer of steel with a rubber tip. Dr. J. Frank advanced a theory that the reason why the tendon reflex might be absent in a healthy person was, that sometimes patella tendons were abnormal. If the ligamentum patellæ is abnormally long when the leg is flexed, the tendon is not put on the stretch, it might be struck all day without any result. —*Atlanta Medical and Surgical Journal*, January, 1887.

#### MULTIPLE NEURITIS.

Dr. M. A. Starr embodies this subject in a series of lectures. (1) Historical: He passes in review the contributions of Jackson, Huss, Lancereaux, Duchenne, Dumenil, Eichhorst, Joffroy, and Leyden; also the pathological studies of Ranvier, Neumann, Weir Mitchell, and others. (2) Clinical: Starr describes a number of conditions which may be due to inflammation of the nerve trunks. Among them are the numb fingers of women about the climacteric, intermittent paralysis, and numerous obscure symptoms such as pain, formication, numbness, flashes of cold and heat, tremors and slight spasms, and weakness not amounting to paresis. He attributes the following to inflammation of the nerves: (1) toxic cases, due to alcohol, arsenic, lead, and bisulphide of carbon; (2) infectious cases due to the poisons of diphtheria, variola, typhoid and typhus fevers, malaria, tubercle, and beri-beri; (3) spontaneous cases due to cold, damp, and over-exertion. Of these numerous causes, alcohol and lead furnish perhaps the most characteristic cases, marked by paralysis of the extensor muscles especially. Many valuable cases, with their characteristic features, are found in these lectures. The special senses, especially the eye, are sometimes affected, and a gait produced somewhat similar to that of locomotor ataxia. In a case of lead-poisoning, observed by Schultze, there was found marked change in the trunk of the musculo-spiral nerve below the point where the branch to the supinator-longus is given off. Many of the paralyses following the infectious diseases are ascribed by Starr to a neuritis. That many of them are due to this lesion is no doubt true, but it is incontestable that central lesions also follow these diseases. The familiar diphtheritic paralysis has been ascribed probably correctly to a neuritis beginning in the nerve-endings which have been dipped in the poison. Starr thinks that tubercle can also cause a multiple neuritis, and gives cases, but he is not so sure about syphilis producing this lesion. He



examines the subject of beri-beri at length, but we reserve that for Dr. Seguin's paper which follows. On the general subject of symptomatology, Starr dwells at length upon the sensory phenomena, which all writers appear to rely upon, mainly to differentiate this disease from affections of the anterior horns. Pain, paræsthesia, tenderness of nerve-trunks, rheumatoid pains in joints, hyperæsthesia and anæsthesia, are the features of the sensory disturbance. These phenomena are usually below the elbows and knees, but not always so. The paralysis varies very much in location and range according to the number of nerves involved. The paralyzed muscles are flabby and atrophied. Tendon reflexes are abolished. Changes to electricity vary, but faradic contractility is apt to be lost early, and to galvanism there are marked quantitative and qualitative changes. Starr thinks that this quantitative decrease is earlier and more marked than in poliomyelitis. Vaso-motor and trophic changes occur in various forms and degrees, but are not constant. The sphincters are not involved. The main indications for diagnosis from poliomyelitis, locomotor ataxia, and diffuse myelitis, are given in full. In the treatment, Starr thinks that an expectant plan would probably suffice in many cases, but still advises against giving to therapeutics a passive part. Salicin, bromides, and morphia are recommended, and strychnia for the chronic cases. Baths, massage, and electricity are recommended in great detail. It is not too much to say that Starr's lectures cover the whole ground, and leave little to be desired by any one desirous to become acquainted with this subject.—*Medical News*, February 5, 1887.

#### EXPERIMENTAL RESEARCHES ON MERCURIAL POISONING; LESION OF THE PERIPHERAL NERVES.

M. Maurice Letulle has recently presented to the Académie des Sciences a very interesting and timely paper on this subject. He had observed in his hospital service several cases of mercurial poisoning, the special character of which had fixed his attention. Thus there were preservation of the normal contractility to faradism and galvanism, absence of muscular wasting, preservation of the tendon reflexes, and co-existence of sensitive troubles, with motor paralysis in the regions affected. A comparison of this affection with lead palsy, led him to two conclusions:—

1. The mercurial paralyses indicate lesions which are confined to the peripheral nerves.
2. The difference in symptoms between lead and mercurial palsies indicate alterations which are not identical.

In the absence of an autopsy Letulle made investigations upon the lower animals, by subcutaneous injections either near a nerve-trunk or at a distance, and by inhalation of acid nitrate of mercury and of metallic mercury.

He concludes as follows with reference to the lesions: The special character of the mercurial affection of the peripheral nerve consists in progressive destruction of the myelin with preservation of the axis cylinder, and without proliferation of the nucleus of the sheath of Schwann. These trophic alterations are segmentary, *i.e.*, do not extend continuously along the nerve trunk.—*La Semaine Méd.*, January, 1887.

#### PERIPHERAL NEURITIS, AND THE PAINFUL PARALYSES OF EARLY LIFE.

Under this head, Dr. Henry Dwight Chapin takes advantage of the prevalent interest felt in this subject of neuritis to call attention to certain forms of infantile paralysis, which have certainly been observed by all clinicians in nervous diseases, but not sufficiently demarcated. Certain cases have puzzled Dr. Chapin "in endeavoring to fit them in with the usual classification of the text-books." He gives details of four cases which differ from the usual type chiefly in being marked by decided pain at the onset and during the continuance of the disease. In the case of a five-year old boy these severe pains were followed in a short time by a gradual paralysis affecting the extensor muscles, first of the legs, then of the forearms, causing the characteristic foot-drop and wrist-drop. These parts were very painful. Lead-poisoning was excluded by careful search. The patient gradually recovered. It is probable that this case would have been called a few years ago a spinal case, perhaps with some meningitis. Dr. Chapin, with more apparent reason, calls it a multiple neuritis. He, however, speaks approvingly of Leyden's opinion that various lesions or morbid processes may underlie the same clinical history. Indeed, the latter's opinion, that in atrophic paralysis there may be a *co-existence* of neuritis with a spinal cord lesion, and that such forms of paralysis may have their beginning in any part of the motor apparatus, thence spreading to other parts, is the broadest, and perhaps will be the ultimate view which will hold on the subject.—*Medical Record*, January 15, 1887.

#### NEURITIS PLANTARIS.

Dr. C. H. Hughes has given a description of a "rare, painful, and formidable malady" of the terminal distribution of certain nerves of the foot. It may come as a sequel of low fevers, phthisis, chronic rheumatism, or badly-managed gonorrhœa. It was seen in some forms of caisson disease at the time of the building of the St. Louis bridge; and it has been known to follow the so-called mountain fever of Colorado. The disease is marked especially by pain, which is usually localized in the balls and tips of the three toes supplied by the internal plantar nerve, and in the heel and plantar arch of the foot, but sometimes implicates the two smaller toes, which are supplied from the external



branch of the plantar nerve. It is sometimes accompanied by misleading vaso-motor disturbances, suggesting erysipelas or abscess. The pain is usually exquisite. The disease, as seen by Hughes, is similar to, but not the same as the "erythemomegalalgia" of Weir Mitchell. A case is given in detail following mountain-fever, and accompanied by an abnormal heart rate. The motor disturbances were tremulousness and choreic movements. There was also pain at the emergence of the left sciatic from the pelvis. There seems in these cases to be a tendency to trophic skin changes, rather than to amyotrophic paralysis.—*Weekly Medical Review*, March 12, 1887.

#### TROPICAL BERI-BERI.

Dr. E. C. Seguin recently read a paper before the Philadelphia Neurological Society, giving details of three cases of this disease. It is notable upon reading these cases how easily a careless clinical study of their symptoms might have led to very diverse opinions (and may do so yet in similar cases) as one case bore a superficial resemblance to œdema from a cardiac lesion, and another had some points of similarity to locomotor ataxia. It is quite possible that beri-beri may yet become a familiar disease in this country. Dr. Seguin's first case was marked especially by pain and œdema in feet, cardiac palpitation, with pulse of 120; slight muscular weakness. Later, œdema of face, legs, and genitals, and palpitation continued with cardiac souffles. Hand muscles, as well as leg, lost power, and patellar reflexes were abolished. No fever, and no albumin or sugar in urine. At the height of the disease the left ventricle of the heart was enlarged, and a mitral regurgitant murmur was heard. These symptoms, which disappeared with the patient's convalescence, are attributed to a lesion of the heart-muscle, an amyotrophy. The reactions of degeneration were present in the muscles of the limbs. The second case had numbness of the feet and toes, with much pain (which was not fulgurating), and later had no patellar reflex; also had an awkward gait, with slapping of the feet, and staggering and swaying with the eyes shut. There was also some anæsthesia, and some œdema. He had no vesical paresis, loss of sexual power, or spinal pains. Charcot confirmed the diagnosis of a multiple neuritis in this case, and the patient entirely recovered. The onset of the third case was marked by numbness and œdema of legs, then in hands. Those parts became weak. No dyspnœa or fever. Certain muscles were paretic, and gave the reactions of degeneration. These cases are compared with a case of alcoholic paralysis, and, with two cases which Dr. Seguin formerly described as examples of anterior poliomyelitis, but which he now thinks ought to be regarded as cases of multiple neuritis. Beri-beri seems to be confined chiefly to Japan (where it is called ka-ke) parts of India, Egypt, Brazil, and the islands of the Gulf.—*Medical and Surgical Reporter*, January 15, 1887.

## CHOREA.

*The Seasonal Relations of Chorea and Rheumatism.*—Dr. Morris J. Lewis gives results on this subject drawn from certain monthly tracings of the onset of these diseases as compared with meteorological tracings of mean relative humidity, mean barometer, mean daily range of thermometer, cloudy days and storm centres. A decided resemblance is found to exist between the tracings of these two diseases and the tracing for storm centres within a radius of four hundred miles around Philadelphia. This resemblance may be briefly stated as follows: Chorea gives the lowest average in October and November—about 4 per cent.—rising in January to 8.2 per cent., falls slightly in February, and rises in March to its highest point, 15.3 per cent. May and July give about 10.5 per cent. and then the disease gradually falls off until October. The tracing for acute articular rheumatism (based upon 467 cases) is exactly one month later than chorea, which would not be expected, while the tracing for storm centres corresponds with the tracing for chorea almost exactly.—*Polyclinic*, January, 1887.

*The Treatment of Chorea Minor by the Hypodermatic Injection of Fowler's Solution.*—Dr. Frühwald reports improvement in from one to two weeks under this treatment, and cure in from three to four weeks. Fowler's solution is mixed, perfectly fresh, with an equal part of distilled water, filtered and injected deep into the tissues, the skin being first washed with thymol. He uses a Pravaz syringe, and gives the first day one division full, increasing each day by one division full, until eight to ten are given at once.—*Deut. Med. Zeit.*, January 3, 1887, quoting "Jahrb. f. Kinderheilk," N. F., Bd., xxiv. 1, 2.

*School-Made Chorea.*—Dr. Octavius Sturgis attributes a certain proportion of the cases of chorea found in the London schools to (1) over-work; (2) excitement in examination; (3) home-lessons; (4) flogging and kindred brutal customs. The cases, however, appear to be ill-fed children of the London poorer classes, and their social and domestic surroundings probably contribute to the result.—*Lancet*, January 15, 1887.

## THE TREATMENT OF NEURALGIA.

*Terpine.*—Dr. Ducroux, in a paper before the Société Médico-Pratique recommends terpine in facial neuralgia. It was given in doses of .60 centigramme "in three pills between meals, during three days." The disease showing a tendency to return, the treatment was kept up, and, afterwards, "doses of .80 centigramme were administered in four pills for three days." This treatment was resorted to again several times as required, with relief to the patient. Two other cases were relieved by similar treatment.—Quoted in *Medical and Surgical Reporter*, January 29, 1887.



*Aconitine*.—Dr. L. Guesdon recommends the pills of Moussette, each of which he says contains one-fifth of a milligramme of aconitine. When the symptoms are periodic and intermittent, he recommends that quinine be combined with the aconitine in appropriate doses. He advises that the treatment be commenced with one pill three times a day. If this amount of the drug fails to relieve the pain the pills can be increased by one a day until as many as six are given in the twenty-four hours. The trials made in the hospitals of Paris prove incontestably that the genuine Moussette pills have great value.—*Gaz. des Hôpitaux*, March 10, 1887.

*Napelline*.—Grognot prescribed two and a half milligrammes every two hours for facial neuralgia. The patient took ten doses the first day, four the following day, and two upon the third day. In two months the attack was renewed and successfully resisted with eight granules, each of two and a half milligrammes. The author believes that napelline may succeed when crystallized aconitine fails, and thinks that the drug ought to be rescued from the oblivion into which it seems to have fallen.—Quoted in *London Medical Record*, March 15, 1887.

*Chloride of Methyl*.—Dr. Dudley Tait concludes that this substance, in spray, may be used with great advantage in all neuralgic affections; also for pain in pulmonary affections, acute and chronic rheumatism, in writers' cramp, and especially in tri-facial neuralgia. One application usually suffices, and the majority of cases are definitely cured. Success has also been obtained in neuralgias caused by Pott's disease, pelvic tumors, etc.—*Kansas City Medical Index*.

*Neurectomy and Neuro-Tension*.—Dr. Guy Hinsdale reports two cases: (1) A woman who was the victim of severe facial neuralgia with painful points in the supra- and infra-orbital regions. The disease was of thirty years' standing; the patient had undergone a varied treatment. The infra-orbital nerve was exsected by Drs. Hunt and Morton. She was much relieved, and nine months later was reported to have little or no neuralgia. (2) A case of spasm of the face, for which Dr. Keen stretched the facial nerve, using force enough to lift the head. Total paralysis of the face followed, with relief not only of the spasm of the face and neck, but also of that of the side and leg which had recently co-existed with it. The history of similar operations shows relief of the spasm as long as the paralysis lasts, but unfortunately, in the majority of cases the spasm seems to have returned as the paralysis passed off.—*Medical and Surgical Reporter*, February 5, 1887.

*Salicylate of Sodium*.—Dr. F. X. Dercum reports marked success in the treatment of a case of *tic douloureux* of twelve years standing, with large doses of salicylates. The paroxysms were of great se-

verity and frequency. The patient was a woman 52 years of age. She was always worse in cold, damp, and stormy weather. The superior maxillary was the nerve chiefly affected. She had only had one complete remission, which occurred during an attack of severe rheumatism of eight weeks' duration. It was determined to try anti-rheumatic treatment; accordingly the patient was given fifteen minims of oil of gaultheria every three hours. In four days she was better. The remedy was continued several weeks, controlling the *tic*, but interfering with digestion. Salicylate of sodium in twenty-grain doses was then given every four hours, the patient herself increasing it to thirty grains, thus taking in four doses one hundred and twenty grains a day. Every trace of the *tic douloureux* now disappeared, and up to the time of the report the patient had remained well.—*Philadelphia Medical Times*, April 16, 1887.

*Antipyrin in Hemicrania.*—Dr. E. Ungar states that antipyrin, especially in the early stages of this affection, acts better than other remedies. He was induced to give it a trial by its similarity of action to salicylate of sodium. It was given in doses of fifteen to twenty-three grains (1.0 to 1.5 gram).—*Centralbl. f. Klin. Med.*, No. 45, 1886, quoted in *Cent. f. Ges. Ther.*, January, 1887.

---

## GYNÆCOLOGY AND OBSTETRICS.

UNDER THE CHARGE OF

WILLIAM H. PARISH, M.D.,

Gynæcologist to the Philadelphia Hospital, Professor in the Woman's Medical College, Philadelphia, etc.

---

### VAGINAL PRESSURE IN THE TREATMENT OF CHRONIC PELVIC DISEASE.

An interesting paper has been published by Dr. A. Reeves Jackson, on "Vaginal Pressure in the Treatment of Chronic Pelvic Disease," from which the following is taken:—

In 1878, Dr. Taliaferro, of Georgia, published a paper on "The Application of Pressure in Diseases of the Uterus," in which he advocated pressure in the treatment of diseases of the pelvic organs, characterized by habitual passive congestion and its results, namely, displacements, enlargement, relaxation, erosions, menstrual disorders, etc. He placed the patient in the knee-chest position, and with a Sims' speculum packed the vagina, at first, with absorbent cotton saturated with glycerine. He found the cotton became compressed and hard, and for it he later substituted absorbent wool. He reported a number of cases treated. In one there was supra-vaginal elongation of the cervix, with complete cystocele and vaginal eversion, forming a large external tumor. The uterine canal measured six inches. After packing the vagina



every third day for two weeks, the length of the canal was three inches, and the patient was quite free from all symptoms. A plastic operation completed the cure. Dr. Taliaferro insisted on the Sims' position, or the genu-pectoral, during the tamponnement of the vagina, and claimed the following results: 1st. It diminishes blood-supply and nutrition. 2d. It promotes absorption. 3d. It removes hyperplastic tissue by retrograde metamorphosis. 4th. It diminishes nervous action; and 5th. It rectifies malpositions.

Dr. Mundé, in referring to this treatment, says, "Of the value of this steady elastic pressure and support in reducing the size of an engorged hyperplastic or subinvolted uterus and restoring the normal circulation to the œdematous and congested pelvic cellular tissue I have no doubt; neither of the potent alterative effect on old peritonitic or cellulitic exudations and adhesions."

Dr. Jackson has observed occasionally, after removing the tampon, erosions on the cervix or vagina with very slight bleeding, and interpreted this condition as indicating that the packing had been either too firmly or unequally placed.

When there is moderate cervical laceration he endeavors to pack around the cervix in such a way as to prevent the separation of the lips. When any part of the mucous membrane is soft and succulent, he combines tannin or alum with the glycerine, with which the cotton or wool is saturated. Occasionally, glycerine will irritate the vagina, and necessitate desistance from the treatment. It is difficult to secure a good preparation of absorbent wool, and it absorbs but little glycerine, so that it is best to use cotton for the upper vagina. He has tried oakum and jute, but they do not answer as well as the wool. He prefers multiple pieces. It is important that the pressure be uniform, and that cannot be so well secured with a single or several large pieces, as with a number of small ones, though a single large piece may be used for the lower half of the vagina. The upper and smaller pieces should not be larger than a walnut, when saturated. If desiring the packing to remain longer than two days, he rolls the pledgets in boracic acid.

This treatment is of most avail where there is soft engorgement, as in the earlier stages of subinvolution, with or without laceration. In two weeks, more can be accomplished in such cases than can be effected in two months by hot-water douches. Dr. Jackson believes that the efficacy of hot-water douches has been greatly over-estimated. Could the hot douching be kept up thirty hours instead of thirty minutes, more prompt and permanent results would follow. Tamponnement, equally with the hot-water douche, has power to unload the vessels of their stagnant contents, and can be continued week after week without remission and without reaction.

Dr. Jackson cites cases and quotes Mundé, "When the retro-displaced fundus uteri is adherent, these daily emollient and hydragogue tampons may, in time, bring about the absorption, or at least stretching, of the adhesion, and permit a replacement of the organ." On this point Dr. Jackson reports a case, "Uterus retroverted, and the fundus immovably fixed by adhesions. The treatment consisted solely of tampons, with glycerine and boracic acid. Small pledgets of cotton were first placed with firmness behind the cervix; larger ones were then placed in front of the uterus. Large pledgets of wool were now packed into the vagina, each time with more and more firmness, until the canal was distended to its utmost capacity. At first the dressing was removed every day, then every two days. After two months the uterus was thoroughly replaceable, all tenderness had disappeared, and no evidence remained of the former adhesions."—*Weekly Medical Review*, April 23, 1887.

THE GENERAL PRINCIPLES INVOLVED IN THE OPERATIONS OF REMOVAL  
OF THE UTERINE APPENDAGES.

In November, 1886, Mr. Lawson Tait read before the Medical Society of London, a communication on "The General Principles Involved in the Operations of Removal of the Uterine Appendages," in which he says:—

As to nomenclature, certain writers have endeavored to confer upon these various operations the objectionable term of "spaying," evidently with the view of using a term offensive and hurtful to those engaged in this kind of practice. Then comes "castration," copied from the German and French, and used by Sir Spencer Wells, Dr. Hegar, and Dr. Battey. In any volume of surgery this term is retained exclusively for the male. "Castration," so simple in the male, should not be confounded with the far more serious and far more difficult operation of removal of the essential organs of the female. It is quite open to doubt that the ovary is the analogue to the testicle. An overwhelmingly large number of my own operations are performed for the removal of a diseased tube, in which the ovary may be so little affected that its removal is a matter of the utmost indifference. If I remove one suppurating tube, or both tubes, and leave both ovaries, as I often do, how can it be called a case of castration? The word castration had its origin in the mutilation of the lower animals for the purposes of our food supply, and it is a matter of regret that it has been introduced into human surgery.

The nomenclature for which I must plead for a favorable consideration is the use of "*removal of the uterine appendages*" to cover every kind of operation of that nature. With this nomenclature one should also designate the disease for which the operation is done, and occasionally specify the extent to which the removal has



been carried. For instance, the removal of the uterine appendages "for myoma," means the double operation, as for such a disease a single operation would be an absurdity. Then the removal of the uterine appendages for "chronic inflammatory disease," which may be unilateral or bilateral; or may mean the removal of one or both tubes without the ovaries. There is the operation for "reflex conditions," involving, necessarily, the double operation. We have also the separate groups of removal of one or both ovaries for cystoma, the removal of parovarian cysts, and hysterotomy. There are instances in which it is difficult to say in which of these various groups the operation properly belongs. For instance, a myoma may be complicated with cystic ovaries, etc.

Referring to "castration," Sir Spencer Wells has said, "Its potential fatality as regards the subject of it sinks into insignificance when compared with the absolute extinguishment of one line of species." But in the great majority—I think, ninety-five per cent.—of the cases of various kinds which are suitable for this operation, sterility has already been secured by the disease for which the operation is performed. Myomata, in the great majority of cases, absolutely destroy the possibility of maternity.

The sufferings and risks of myoma have been greatly overlooked, and when we see a patient suffering intense pain and profuse loss at each menstrual period, with a tumor growing, and at an age when it is likely to grow, why should we hesitate to give her relief, and to secure the diminution or disappearance of the tumor by an operation as certain in producing the results aimed at as is any operation in surgery, and attended with a mortality of less than two per cent.?

"The operation," as is stated by Sir Spencer Wells, "is to be resorted to in certain malformations of the genital organs, deformities of the pelvis, and accidental obstruction of the vagina. In such cases sterility pre-exists."

Sir Spencer Wells further says, "The right to use this operation is very limited in cases of ovarian dysmenorrhœa or neuralgia, and only when they have resisted all treatment, and life or reason is endangered." I have become extremely skeptical that there is such a thing as ovarian dysmenorrhœa. Even when the ovaries are bound down by adhesions, I am disposed to believe the intense pain is uterine or tubal. I am disposed to accept Well's conclusion, and to extend it to certain cases in the lower ranks of life. A servant girl, or governess, or shop-girl with intense menstrual suffering, and consequent inability to retain a situation, secures a new life, if you remove the appendages and enable her to earn her living. In such cases, the only other treatment likely to cure is that by rest and methods of luxury, and this treatment is an absolute impossibility with such patients. For the

poorer classes there is nothing but the operation that will give permanent security in the obstinate cases.

Sir Spencer Wells concludes also that "in nearly all cases of nervous excitement and madness it is inadmissible." I am disposed to agree with him on this point. I have given up the practice of performing the operation on nervous cases entirely. I also agree with Wells, that "it should never be done without the consent of a sane patient, to whom its consequences have been explained." Save when the seat of such organic disease as will explain genuine suffering, the uterine appendages ought not to be removed, and those who attribute all the pelvic aches and ails to the ovaries and tubes, and rush in to remove them, are dangerous people.

Sir Spencer Wells asks, "Who can diagnosticate with certainty the presence of irreparable disease in these out of the way organs?" I have done it hundreds of times, and there are successful operations in all parts of the world with the diagnosis previously and correctly made. Consultations in such cases are eminently proper, but in some instances eminently farcical, because of the prejudice held by some against the operation.

In my own cases diseases of the uterine appendages are extremely common, and the operation for the removal are extremely frequent, because I tap the *clientèle* of the whole world. Dr. Kingston Fowler found, during three years at the Middlesex Hospital, fifteen cases of pyosalpinx, and of these eight had been fatal from peritonitis, due to rupture of the pyosalpinx. In the Queen Charlotte Lying-in-Hospital, within a certain period, there were five deaths during the puerperal state and four of these were due to chronic lesion of the appendages. If the abdomen were promptly opened and causes searched for, not only would septicæmia (after labor) be to a large extent banished, but we might be able to save lives which are now being lost.

#### THE TREATMENT OF UTERINE DISPLACEMENTS BY GALVANIC AND FARADIC ELECTRICITY.

From a paper published by Dr. Engleman on "The Treatment of Uterine Displacements by Galvanic and Faradic Electricity," we learn that he considers both galvanic and faradic electricity as of valuable aid in the treatment of uterine displacements, not to supplant, but to aid other means already in use. It is directed toward the removal of the cause, toward overcoming the morbid conditions productive of the displacements, or which are dependent upon them. The electricity is used every second or third day, reposition being in the meantime secured by the elastic tampon. Mild utero-abdominal and vagino-abdominal faradic currents stimulate development and the menstrual flow in amenorrhœa; the utero-abdominal galvanism effects the same purpose where 5 to 10 milliamperes are used, the negative, non-



metallic pole in the uterus. Flexions, due to relaxations of tissues about the internal os, are similarly treated. Flexions or erosions associated with metritis and hyperplasia, are overcome by strong, absorbent galvanic currents, 60 to 100, or even 200 M.A., the negative metallic pole in the uterine cavity. Adhesions are relaxed, and their absorption is furthered by similar galvanic currents, the negative pole being applied, per vaginam, as near as can be to the perimetric band. Relaxation of tissue, *deceusus uteri*, and subinvolution, are met by such strong faradic currents as are produced by the secondary helix of heavy wire, a stringent tampon aiding the treatment. For older prolapsus, the galvanic-electrolytic current should be first used to reduce the enlargement, and the contractile action of the faradic current is then applied to strengthen the tissue, and so to approximate the normal condition. The good results attainable by electricity, aided by the dry treatment, would put an end to the abuse of the pessary, and close its dangerous career. By electricity, displacements are reduced and symptoms relieved without danger or discomfort to the patient. It gives ease at once, and betters circum-uterine inflammation, without aggravating or exciting inflammatory action, as does the pessary.—*Obstetric Gazette*, April, 1887.

#### A CASE OF VAGINAL HYSTERECTOMY.

L. G. Richelot, of Paris, reports "A case of Vaginal Hysterectomy," of which the following is an abstract:—

The patient, æt. 44 years; 4 para; easy labors; was an inmate of l'Hôpital Necker; slight menorrhagia, with sanguineous leucorrhœa. The uterine cervix was enlarged, moderately painful, irregular, and the canal of the neck papulated, and with a fungous ulceration extending anteriorly and to the right, but the *cul-de-sac* apparently free, and the uterus movable. General condition bad, pale, emaciated, senile. Improvement by rest and tonic treatment. Vagina disinfected each day with bichloride injections and iodoform tampons.

*Vaginal Hysterectomy, November 25, 1886.*—Vulva of large size, and uterus easily drawn down; anterior incision at base of the neck; detachment of the bladder with the finger; hæmostatic forceps to small artery; tearing into the anterior peritoneal *cul-de-sac* with the fingers, and the placing in this *cul-de-sac* of a mounted sponge; extension of incision laterally and posteriorly, cutting toward the uterus, and from below upwards; Douglas' pouch incised, and incision enlarged with the fingers. Without further exploration, the introduction of the posterior blade of the long hæmostatic forceps, guided by the left index, to the posterior surface of the broad ligament. The anterior blade similarly applied in front of that ligament through the anterior *cul-de-sac*. The right broad ligament was thus clamped a little distance from the

border of the uterus. The forceps did not quite reach the top of the broad ligament. This ligament was cut close to the uterus as high as the upper end of the forceps. On the left the long forceps were now applied, the guiding finger not reaching either to the top of the ligament or the end of forceps. The left broad ligament cut close to the border of the forceps and the uterus entirely disconnected on that side, the forceps clamping the ligament its entire height, the uterus being still held by its right corner was drawn upon, and the upper border of the right ligament clamped by another pair of long forceps, and the uterus cut loose at that point. There were now attached three long forceps to the broad ligaments, and four ordinary hæmostatic forceps to the sub-peritoneal tissues; cleansing with mounted sponges and iodoform tampons. Operation lasted thirty minutes. An intra-cervical cancer extending upward to the isthmus and downward on to the anterior lip, and producing ectropion.

After recovery from the ether there was great pain, relieved by hypodermic injections of one centigramme of morphia; urinated at will after the second day; slight vomiting; iced champagne and a little cold bouillon. After thirty-six hours removed forceps and changed the two superficial tampons. Highest temperature  $37.4^{\circ}$  Fahr. On the fourth day removed all the tampons; a corrosive sublimate injection was now carefully and gently made twice daily, and in the interval an iodoform tampon was placed. Patient was out of bed on the fifteenth day, and left the hospital after about one month from the operation. Vaginal touch at that time gave no pain, and union and cicatrization seemed complete.—*L'Union Méd.*, January 9, 1887.

#### ON CERTAIN ANATOMICAL RELATIONS OF THE UTERINE ARTERY AND OF THE URETER APROPOS OF VAGINAL HYSTERECTOMY.

Dr. Ricard publishes an article "On certain anatomical relations of the uterine artery and of the ureter, apropos of Vaginal Hysterectomy," and submits the following conclusions:—

1st. To remove the uterus, per vaginam, it is necessary in making the dissection not to depart too far from the insertion of the vagina on the neck, not only in the lateral *cul-de-sac*, but especially at the union of the anterior and lateral portions of the vaginal *cul-de-sac*. This rule is especially imperative when the uterus is drawn down.

2d If the surgeon prefers to extirpate a portion of the vaginal tissue, he can only do so safely by careful dissection of the vaginal wall, and by following it straight to its uterine insertion.

If he attempts to remove a portion of the supra-vaginal tissue, the ureter will almost certainly be reached.

The least neoplastic invasion of the *cul-de-sac* of the vagina must be regarded as a formal contra-indication for hysterectomy, for such invasion necessitates an extended ablation of the contiguous tissues.



In this case, as in that of invasion of the broad ligaments, however minute it may be, the surgeon has the alternative either of leaving the operation incomplete, or of wounding the ureter.

Injury to the ureter is less to be feared during the control of hemorrhage in the broad ligament than during the incision of the antero-lateral *cul-de-sac* and the control of hemorrhage therefrom. There lies the actual danger.—*La Semaine Médicale*, February 2, 1887.

#### FIFTY CASES OF OVARIOTOMY.

Skene Keith, M.B., has submitted a report of his last "Fifty cases of Ovariectomy," of which we quote in abstract:—

In this, my second series of fifty cases, there is a diminished number that have been tapped, only 11, *i.e.*, 22 per cent. against 32 per cent. in the first fifty, a very satisfactory fact, for tapping should be rarely performed. One of the reasons for the greatly lessened mortality after ovariectomy, to-day, is that the operations are less severe. Twenty-five years ago it was almost a crime to remove an ovarian tumor, and patients were not handed over to the operator until their lives were worth little. Now, operations are performed much earlier. A second important factor in the production of the lessened death-rate, is the principle of perfect cleanliness of Lister. No one would ever think of putting a dirty finger, sponge, or instrument into the abdomen, and this systematic cleanliness is the outcome of Lister's antiseptics.

Increased experience is not to be lost sight of. No one ought to do abdominal surgery unless he has watched others at work. The intra-peritoneal treatment of the pedicle has also probably something to do with our present success, but almost as good results might be obtained with the clamp, if proper care were taken to dry the stump and to prevent septic matter reaching the wound or the peritoneum. The real objection to the clamp is that the wound cannot heal by the first intention throughout its whole extent.

Drainage saves the lives of some. The objections raised against the tube were that it produced hernia, and that the omentum was likely to enter the holes and become strangulated. A tube the size of a man's thumb might cause a hernia, and holes that are too large might admit of the entrance of portions of omentum, but the tube and the holes should not be too large. We have now better instruments and take better care of our patients after operation. The routine practice of giving so much opium so many times a day, is giving place to the more enlightened plan of using the drug in suitable cases, and with some definite object; though some have gone to the opposite extreme, and say they never give it under any circumstances. About twenty years ago, Dr. Keith used often to wash out the peritoneal

cavity with warm water, and now it has been taken up as one of the most recent advances. When a long incision is necessary there are usually numerous adhesions. The majority of parovarian cysts are cured by tapping, abdominal incision being required only in exceptional cases. Malignant cysts of the parovarium do not flourish in Scotland. It remains a mystery why surgeons will not even try to cure these cysts by simple means; a trocar, and canula not larger than a No. 4 or 5 catheter, is all that is required. At present a smaller death-rate accompanies the operation of ovariectomy than that of the other operations. Of fifty-six operations performed by Mr. Tait, eight were fatal, *i.e.*, one in seven.

In a patient of mine, aged 75, the tumor weighed fully thirty pounds, the adhesions were too numerous and vascular to justify removal, and I incised and emptied the cyst of thick fluid, washed it out with warm water, and introduced a large rubber tube. The sac suppurated, and the patient is now quite well.

#### TREATMENT OF FIBROID TUMORS OF THE UTERUS BY ELECTROLYSIS, ETC.

Dr. F. H. Martin, has published an interesting article on "The treatment of Fibroid Tumors of the Uterus by Electrolysis, etc.," and submitted the following conclusions:—

1. A means of generating a continuous current of electricity, which can be increased from 10 to 1000 milliamperes in strength, is necessary in order to obtain all the benefits of the treatment.

2. Hemorrhages from hemorrhagic tumors can be cured by the local coagulating effect of the positive pole applied intra-uterine.

3. The intra-uterine electrode, when positive, should be of unattackable metal, conforming as nearly as possible to the size and shape of the uterine canal, and having the vaginal portion insulated.

4. When the cervical portion cannot be entered, a negative galvano-puncture should be made into the presenting part of the obstructing mass of the tumor, and an artificial canal, which is to take the place of the impenetrable uterine canal in all subsequent treatment, be formed.

5. The intra-uterine electrode should in all cases be negative, unless there is hemorrhage or excessive leucorrhœa, when the positive pole is always required. The same patient may, however, present successive symptoms demanding the use of each pole.

6. The current should be the strongest possible, consistent with the desired therapeutic effect and the endurance of the patient.

7. Cases of intolerance of high doses arrange themselves under the three following heads: (1) hysteria; (2) enteritis; (3) acute nephritis,—prior parametritis,—the most tolerant being the deep uterine and profusely hemorrhagic.



8. The duration of the operation should be from eight to ten minutes, according to the toleration of the patient.

9. The number of operations is necessarily dependent upon and influenced by the result to be accomplished. A severe hemorrhage can be checked in from four to five séances, while a general reduction of the tumor necessitates many operations, varied according to size and location. In many cases simply a restoration to health, and a relief from the prominent and annoying symptoms must be accepted as a substitute for an actual cure.

10. The time of commencing the treatment matters but little if the tumor is not rapidly growing and no excessive hemorrhage is present. The operation should be intermenstrual, if possible, but, if hemorrhage is continuous, operate during the flow. The séances should occur two or three times a week if compatible with the endurance of the patient, and should be as regular as possible.

11. Extra-uterine puncture should be regarded only as a last resort, but every means of reaching the tumor through the uterus being impracticable, seek, if possible, to make the operation extra-peritoneal. Should this in turn prove equally unadvisable, use as a final alternative the abdominal puncture.

12. Strictest cleanliness and thorough antiseptic precautions are absolutely demanded in operations connected with this treatment.—  
*Journal of the American Medical Association.*

#### THE TREATMENT OF POST-PARTUM HEMORRHAGE.

Dr. Guida Turazza has published an interesting article on "The Treatment of Post-Partum Hemorrhage," in the *Gazetta degli ospitali*, of which a translation appeared in *Gazette de Gynécologie*, of April 1, 1887:—

In January, 1886, Dr. Turazza attended a multipara in labor at the seventh month, and with violent hemorrhage. The trunk presented, a foot and hand in advance. Delivered at once, and easily, by traction on the leg. Extraction of the placenta was followed by alarming flooding. Injected immediately hot carbolated water, so hot that the hand could not bear it long. In two or three minutes the flooding stopped, and the uterus retracted. Gave thirty centigrammes of ergot every half hour, and the bleeding did not recur. The premature labor was due to bronchitis. Patient recovered.

Hot-water coagulated blood excites uterine contractions, and restores warmth to the anæmic woman. As a remedy, it is simple, accessible, annoys the patient least, and, if it has been boiled, is aseptic. Dr. Turazza prefers to add corrosive sublimate to the water, 1 to 2000. He does not recommend carbolic acid, for it is easily absorbed, and twice (solution of 100 cent.) he had noted symptoms of absorp-

tion. Other cases of poisoning by carbolic acid thus used are noted. Injections of corrosive sublimate are less harmful, and rarely cause symptoms of poisoning. If the liquid is not retained, its absorption is too trifling to harm, and when used in the most diluted form, is more antiseptic than a 5 per cent. solution of carbolic acid.

Pénard has replaced corrosive sublimate by biniodide of mercury (*Annales de Gynécologie*, December, 1885, and January, 1886). Turazza states that cases of corrosive sublimate poisoning occur. Boracic acid forms a good antiseptic when there is reason to fear accidents from carbolic acid or sublimate. Schroeder relies upon corrosive sublimate solution of 1 to 5000, and a reliable treatment of post-partum flooding is then the injection of hot water (40° to 50° Fahr.) containing sublimate 1 to 5000. Whiskey, undiluted, has been injected, and found to promptly stop flooding, this effect being due to the alcohol it contains.

Every physician attending a labor should have at hand an irrigator or a syringe and corrosive sublimate. If the child is dead, antiseptic injections may be given before its delivery. No air must be allowed to enter the uterine cavity. As an adjunct to hot-water injections for post-partum flooding, hot compresses renewed every two minutes should be applied over the abdomen, and these, if reapplied, will prevent recurrence of bleeding. External manipulation and hypodermic injections of ergotine should be resorted to. If exhausted the patient should receive anæsthetic remedies. Turazza quotes Betz, as advocating the administration, *per orem*, of a weak solution of common salt (one spoonful to a litre of water) and three spoonfuls every five minutes until half a litre of the solution has been taken. The treatment is rational. Tamponnement must be absolutely proscribed.

#### PLACENTA PRÆVIA.

An editorial has appeared in *The Lancet* on "Placenta Prævia," of which the following is a summary:—

The most urgent and serious complication of labor is hemorrhage, and there is no more important cause of hemorrhage than placenta prævia. Of late our knowledge has been somewhat disturbed by the studies of the "lower uterine segment," stimulated as they have been by the investigations of Ludwig Bandl on uterine rupture. As a result of these studies, it is now recognized that during labor the uterus becomes differentiated into a retracting and ever-thickening fundus, a stretching and ever-thinning "lower uterine segment," and the cervix,—it is not finally settled what is cervix and what is "lower uterine segment." After labor the lowest part of the retracted fundus is felt at the bottom of the hard uterine cricket-ball; below it comes the cervix and "lower uterine segment," hanging loose, apparently uncontracted, flabby, and passive. It is not yet settled why, if this



lower segment is the site of placenta prævia, ANY woman escapes flooding to death. Still the lower segment may be physiologically retracted sufficiently to control bleeding.

Let us recognize a few great propositions in reference to placenta prævia. 1st. The bleeding is from the placental site. 2d. The cause of the bleeding is the detachment of the placenta. 3d. The cause of the detachment of the placenta is the expansion of the lower uterine segment which the placenta cannot follow. The beginning of labor is not always synchronous with the beginning of the "first stage," but begins with the dilatation of the os internum which may precede the "first stage" by days, or even weeks. The bleeding is often due to the same causes that operate in "accidental hemorrhage."

As to treatment one looks in vain in even the most recent textbooks for a plain statement. A certain number of cases progress favorably to a safe termination, and require no interference. Especially may this occur when only a part of the placenta is attached to the area of necessary detachment, but it may occur even where the placenta is implanted across the os internum. In such cases there are strong contractions, and the child may be born wearing the placenta like a cap on his head. On this fact was based Simpson's treatment of complete detachment of the placenta, and also Barnes' modification,—partial detachment. Such cases merely showed unusually vigorous uterine action, shortening the bleeding period, and securing good retraction, the only safeguard against bleeding. To wait for spontaneous termination of placenta prævia would be as wrong as to wait for spontaneous evolution in a cross birth. Add, then, two more great principles. 4th. The dangers of placenta prævia are (*a*) bleeding before and during labor; (*b*) bleeding after delivery; (*c*) septic processes. 5th. The great safeguard against bleeding before, during, and after delivery is uterine retraction. The cause of bleeding before delivery is detachment of the placenta by dilatation of the placental site. The causes of bleeding after labor are two,—imperfect retraction and laceration of the unusually vascular cervix and lower uterine segment. The causes of sepsis are three, namely: The low position of the placental site; the laceration and the imperfect retraction. To avoid and control bleeding the great object has been to secure uterine contraction and retraction. Hence it is directed to empty the uterus as soon as possible. The os is often slow to dilate, and the uterus cannot be rapidly emptied without forced delivery (*accouchement forcé*), which consists in thrusting the hand in and dragging out the foetus by the feet. This is a dangerous proceeding and generally changes an ante-partum bleeding into a post-partum bleeding and blood poisoning. Delivery by the head is not suitable for dangerous cases. Hence, 6th, the great treatment for placenta prævia

is turning by the feet. After this has been effected extraction is not usually necessary, for, 7th, it is found practically that as soon as turning has been effected and the leg brought down the bleeding ceases. This is due in part to the plugging of the cervix, and probably in part to retraction induced by the version.

It follows that, 8th, after the leg is brought down the case may generally be left to nature.

Internal version requires such dilatation of the cervix as can be expected only after labor has continued some time. To wait for this is often impossible, and forced delivery was, formerly, the only alternative. In 1860, Braxton Hicks showed the possibility of turning by the bipolar method when the cervix would admit two fingers, or only one, and advocated this method of turning especially in placenta prævia. This practice was rejected by Spiegelberg and Von Hecker without comprehending it. In 1882, and later, it was adopted by Hofmeier, and others, in Berlin. They treated 236 cases with eight maternal deaths,—a mortality of 3.3 per cent. This was a reduction of mortality from 24 per cent. This method is (*a*) bipolar podalic version as early as possible; (*b*) extraction by natural forces, or after complete spontaneous dilatation. Bleeding practically ceases after version and before extraction. Delay does not greatly enhance the dangers of the child, while the great danger of fatal hemorrhage from laceration is set aside, and a fertile source of sepsis avoided.

Rupture of the membranes and evacuation of the liquor amnii is often impossible when the placenta is completely prævia, and the methods of complete or partial detachment of placenta and plugging, do not furnish such brilliant results, and predispose to sepsis. In France the use of the tampon still holds its own, and results are better since the introduction of antiseptics. Still, it can show no results like the above, and should not be the routine practice among medical men.

In the hands of a midwife plugging would be the best treatment inasmuch as she is not equal to the delicate operation of bipolar version. The tampon excites contractions, controls hemorrhage to a considerable extent (for concealed hemorrhage in placenta prævia is almost unknown), and preserves the membrane for turning by the accoucheur. When the tampon is used it should be with antiseptic precautions, such as washing out the vagina and using cotton or gauze rendered aseptic,—the best material being a bandage of corrosive sublimate gauze.

As to treatment, cases are divisible into two principal classes. The first, is that in which the uterus acts powerfully, and in which to tamponize and to assist as by forceps or rupture of membrane is sufficient. The second class is one in which the uterus is demoralized, and



the tendency is to rapid death ; in the latter the treatment should be (a) bipolar version as soon as possible, (b) extraction actually or practically left to nature.

There is a third class in which the patient is either moribund or in extreme peril from flooding, in which forced delivery by manual dilatation affords the only chance. The best modern practice agrees with Dr. Braxton Hicks' recommendations of 1860.—*Lancet*, February 26 and March 5. 1887.

---

### HYGIENE AND MEDICINE AMONG THE ZULUS.\*

---

One of the peculiarities of the natives of South Africa is their aversion to the use of water for external purposes during dry weather, especially when they are in perspiration. They avoid bathing except during heavy rains, when they take advantage of the opportunity for purposes of bodily cleanliness. Their reasons for so doing are that frequent ablutions debilitate the system and render it incapable of withstanding the local climate, and that very frequently baths are followed by malarial fever or cutaneous eruptions over the joints. One can frequently observe the veracity of this assertion, especially as regards the cutaneous eruption, which generally appears in the popliteal space the very day a bath is taken, even during rainy weather. With strict parsimony in the use of water, the Zulus resist remarkably the dangers of the climate to which they are exposed, and my experience tends to prove that those whites who observe a dry regimen fare far better than those who continue to follow their home habits. I had obtained this information from Antoine d'Abbadie, of the Institute of France, and certainly found it applicable in South Africa. We both observed its teachings and lived, while all those among my companions who sought relief in the free use of water in Africa, died. The three who had, like us, abstained from its use, since 1879, still live. Instead of opening the pores by means of baths, the natives endeavor to close them, on the contrary, by the application of fats over the entire body.

The Zulus lead a frugal life, their food being of the simplest kind. They use but little meat, which they invariably broil. They eat every part of the animal, including the bones, and sometimes even the hide. They make free use of the gall of the animals they eat, to render the meat tender and prevent indigestion, applying a few drops over the morsel they are about to consume. They sleep on mats, the head resting on blocks of wood, which hold it in equilibrium and keep it

\* Written from notes kindly furnished by the Rev. Father Charles Croonenberghs, S.J., of the Zambesi Mission, South Africa.

cool. They rarely suffer from headaches, neuralgia, etc., owing probably to this mode of taking rest, the head not being overheated, as it is among civilized people, by feather pillows.

The ease attending childbirth among them is truly surprising. During a stay of six years in a native village, containing at times as many as fifteen thousand inhabitants, I heard of but two tedious labors, neither of which was attended by loss of life. The procedure is of the simplest, the woman being merely seated on the ground and supported under the axillæ. As to any form of after-treatment, it is not even thought of, and the parturient returns to her household duties generally on the same day. Miscarriages are extremely rare. The word abortion does not exist in their language, while other criminal practices, sodomy, etc., are not known among tribes that have not come in contact with the whites or Arabs.

The regimen of the pregnant woman is of the plainest, and almost entirely vegetarian. The principal articles of food are Indian corn, millet seed, squash, and a sort of wild spinach. They avoid all fermented beverages, and spend the greater part of their time out of doors. The corset is not known to the native women. They wear a lumbar cord, which usually serves to support the legal vestment, but which, during gestation, can but serve to support the abdomen. It is probably due to this, and to the absence of the corset, that so few deformed children are brought into the world. The few who are so born are caused to disappear, triplets being treated likewise. In case of twins, one of the children is destroyed.

Nursing of the infant is continued eighteen months. Besides its natural food, it is given, after the age of two months, a sort of broiled wheat paste, resembling pap.

Surgery is the branch of medical art that, among the Zulus, can be said to be the most advanced. Their treatment of wounds is especially remarkable, and in several complicated cases treated by myself according to the usual methods for two or three months without success, their native physicians brought about a cure in a comparatively short time. Their system is based principally upon the *earliest possible obturation of all wounds*. They first extract the foreign body, bullet or spicule of bone that may be present, in the rudest possible manner, using their fingers or rough forceps. They then close the wound carefully and cover it with a thick paste composed of charcoal and mutton suet, taking care that no portion of the lacerated tissues remain exposed to the air. They treat fractures as we do, using pieces of bark, suitably cut, for splints. I have never seen traces of amputation among them. Swellings of all kinds, the early stages of abscess or anthrax, inflammatory rheumatism, etc., are treated by means of the bulbs of the genus *Allium*, onion, wild garlic, etc. The



bulb, being steeped in water heated almost to the boiling point, is applied while still hot. This treatment is attended with marvellous results, large and very painful swellings disappearing completely in the course of a few hours. The secret of their physicians is the proper selection of the bulbs to be used in a given case. Another valuable remedy much employed by them in swellings and general cutaneous eruptions, elephantiasis, etc., is the wild castor bean, half the size of that employed by us. The Umzila Zulus collect it from the gizzards of birds in the half digested and fermented state in which it is found there. They fill a wide mouthed jar with it, and allow the process of fermentation to continue by exposing it to the sun and air during a period of two months. They then crush the mass and mix it with water, stirring at the same time. The oil found floating upon the surface literally melts away the swelling of sprains, rheumatism, etc., so great is its beneficial power. It must not be forgotten, however, that other ingredients, unknown to me, may play an important part in the results obtained.

The Matabele Zulus do not seem to possess a remedy for syphilis, which has appeared to me, as well as to another missionary, to occur among some families in its hereditary form.

In the treatment of general diseases, they resort, with but little success, however, to the consumption of portions of organs corresponding with the organ diseased. If they suppose that the liver is the seat of trouble, they administer liver, etc. Gall is used by them in two or three drop doses in the treatment of dyspepsia. In fevers they use decoctions of bitter plants, which do not seem of much benefit. For *tænia solium* they use kousso and decoctions of squash seed.

On the whole it seems to me that the remedial measures resorted to by the Zulus are worthy of some investigation. I believe, however, that missionaries alone would inspire sufficient confidence at this time to obtain from them an insight into their methods. It is a notable fact that those natives who are truly versed in the art of healing (those alluded to above being of a much lower order) are few and closely connected with the king. The results obtained by these men are frequently remarkable. A missionary well-known to them, and accredited by some government, bearing at the same time some such present as a gun, a bale of cotton, etc., could obtain permission from the king to question his physicians, while an explorer, a merchant, etc., would most likely meet with a refusal.

## LEPROSY IN VENEZUELA.

THE LEPER HOSPITAL OF MARACAIBO, VENEZUELA, WITH ILLUSTRATIONS OF CASES IN THE VARIOUS STAGES OF THE DISEASE.

By EUGENE H. PLUMACHER,

(U. S. CONSUL.)

Formerly Professor in the University of Nashville, Tenn.

The "Lazareto," or Leper Hospital of Maracaïbo, although not as large as that of Molokai, in the Hawaiian Islands, nor perhaps as are several in the East, is worthy of very careful study.

Soon after my arrival, in 1878, my attention was particularly called to this institution, because of the excellent judgment displayed in its management, the care with which every new method of treatment was tested, and the generous zeal in the cause of science and humanity which has always been characteristic of its directors.

I frequently took occasion to visit the island upon which the Lazareto is situated, and concluded, in 1882, to make an official report upon the subject to the Department of State, with the intention of forwarding a large number of photographs of patients in various types and stages of the disease, which might be interesting to the medical world, and of practical utility in the investigation of the more salient outward features of leprosy. It was impossible, however, at the time, to secure a photographer willing to undertake this somewhat repulsive task, and I contented myself with a general report to the Secretary of State, which was sent by the Department to a leading medical journal, the *Sanitarian*, of New York, and published in the early part of 1883. I shall take the liberty of repeating here some of the general remarks published in the *Sanitarian*, as, with but few exceptions, they are pertinent to the subject.

I am happy to be able to forward at present a collection of photographs taken a few days ago. It has always been a difficult matter to persuade outsiders to expose themselves to the most remote possibility of contagion from the lepers, and many of my acquaintances have shaken their heads ominously upon hearing of my intention to make as complete a study as possible of the Maracaïbo Lazareto and its inmates.

I was fortunate enough to secure an excellent photographer, whom I must mention in terms of the warmest praise, and, on the sixth of April we, in company with the visiting physician, Dr. Alcibiades Flores, visited the leper island, where we found that all arrangements had been made for our reception. The photographer, Mr. Augustine Figueroa, is a Mexican artist of great merit in his profession, and, although the task before him was by no means a pleasant one, he nevertheless undertook it cheerfully and with humane enthusiasm.



Contrary to our expectations, we found but little objection on the part of the patients, the great majority appearing to appreciate that it was not mere curiosity which led us to perpetuate the record of their misery. As will be noticed from the photographs and their descriptions, cases were selected from one extreme to the other, from the almost imperceptible spot which marks the commencement of the disease, to the poor, mutilated body in which there was scarcely left semblance of humanity, mental or physical faculties.\*

In this last visit I had better opportunities than ever before of appreciating the horrors of the disease, and noting the general condition of the lepers, as each photograph was taken under my personal supervision. It was a sad sight to see deformed, mutilated trunks, with scarcely vestiges of extremities, seated before the camera, and



Case in the Primary Stage.

there was something pathetic in the almost universal request to be supplied with pictures of themselves, which could only be constant reminders of their hopeless affliction.

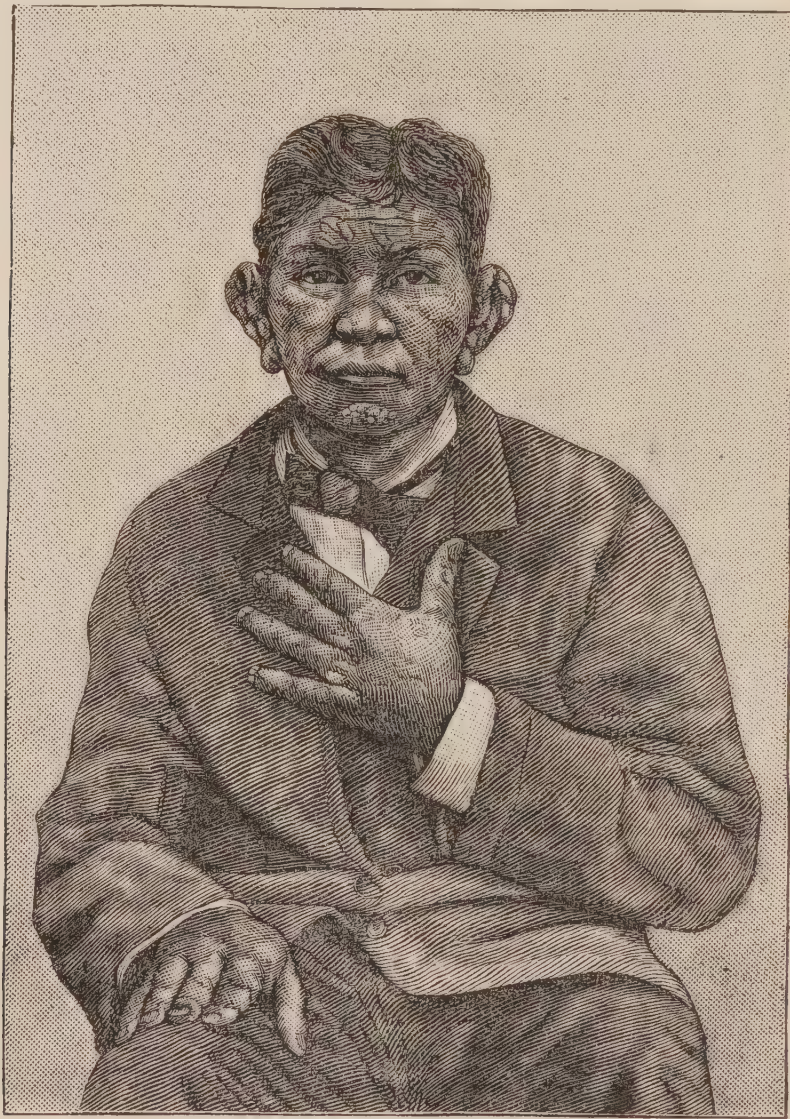
There is one bright spot, however, in the dark picture of misery, and that is the devotion and self-abnegation displayed by the near relatives of many of the sufferers, who, although themselves enjoying the blessings of health and strength, cheerfully submit to perpetual imprisonment in order to minister to the wants of their husbands, mothers, and other relatives, thus alleviating their woes by their society and care. Many examples of this are seen to-day on the Lazareto island, and it speaks well for human affection, that even when the loved one has become a loathsome mass, conjugal ties and the claims of blood rise superior to the fear of contagion and the repulsive surroundings.

\* A full set of the photographs sent will be published in the *ANNUAL*.



I beg to submit a few general remarks concerning leprosy in this country, and also a brief account of the excellent institution established here for the isolation of determined cases.

Although it is more than probable that leprosy has existed in Venezuela from a remote period, it is claimed by native authorities that until 1825 this section was free from this social scourge, and that in that year a native of Santo Domingo, suffering from the disease, landed at Maracaïbo and spread the infection, until it has finally culminated in a serious problem.



Tuberculous Leprosy in the Primary Stage.

In 1828 the growing evil of leprosy attracted the attention of the more thoughtful, and the initiative step was taken in this section by the renting of an island in the lake situated about four miles east of Maracaïbo. This was accomplished by the national government, under the auspices of Bolivar, and in 1841 the island was definitely purchased and transferred to the State of Zulia, the federal government erecting buildings for the reception of patients. In 1873, extensions were added.



It was not until 1876, however, that a movement was inaugurated, which, through the zeal and energy of its promoters, bears fruit to this day. At that period various ladies of Maracaibo set seriously to work to secure funds for the amelioration of the condition of the unfortunates, and for the vigorous prosecution of the task of apprehending, and isolating in the Lazareto, the cases of disease still at large, which had then become sufficiently numerous to seriously endanger the sanitary future of this section. This work was both difficult and disagreeable, the friends of the infected, from mistaken kindness, diligently concealing them from the search of the authorities.



Syphilitic Leprosy in the Advanced Stage.

The humane efforts of the ladies were well seconded by society in general, and, in 1879, a fresh impetus was given to this work of charity by the appointment of a "Junta," with extended powers, to apprehend all lepers, send them to the island, and to dictate measures for their maintenance and treatment and for the general discipline of the institution. It is to the work of this organization that special attention is due, the result of its labors having been extraordinary, considering the obstacles encountered and the trifling aid extended by the government to this work of truly national importance.

In various parts of Venezuela there are places designated for the treatment of leprosy, but the Maracaibo Lazareto is the only one organized on a systematic plan, and it is to be hoped that in view of its

exceptional advantages, it will be selected as a place of reclusion for the entire country, in which case it will, no doubt, become a point of great interest to the medical and philanthropic world. My visits to the island have much impressed me with its suitableness, and the system pursued cannot be too highly recommended.

At present there are about 125 patients under treatment, although it is believed that there are many more still at large in the city and its environs, who will be apprehended as rapidly as the resources at the disposal of the Junta permit.

The interior arrangements of the island are excellent. Capacious cisterns insure a supply of fresh water, and the diet is wholesome and abundant, the cost of the maintenance and treatment of each person amounting monthly to about thirteen dollars in American money. A comfortable building has been erected for the use of the employés, while for the patients a large edifice, built of concrete, forming a parallelogram with a courtyard in the centre, is divided into separate apartments, plainly but sufficiently furnished. A neat chapel has been recently built, where religious service is held every Sunday. A pleasant feature is the establishment of cottages with grounds, in which reside those patients whose means permit of it. Land is given free to any one who is able to erect a dwelling, and, as there are many who possess an income, little homesteads are soon formed.

It was at first a mooted point as to whether marriages should be permitted among patients, and after a lengthy investigation and discussion, it was finally determined that past experience warranted the almost certain belief that such unions would prove unfruitful. As a consequence several weddings took place. For years the theory of sterility was not contradicted by experience, and seemed about to be definitely settled, when two births occurred on the island, the parents in each case being lepers. It has been well understood that a union between a sound and a diseased person would be liable to result in the propagation of diseased offspring, but until the occurrence of the births referred to, it was believed that two undoubted lepers could not procreate, and in these two exceptional cases I would be inclined to ask whether a mistake had not been made in the diagnosis of one or the other of the parents, confounding with true leprosy some other physical taint, which, though similar in appearance, might be different in kind. The effect of these marriages has, no doubt, been to induce more cheerfulness and resignation, and to add greatly to the good discipline of the institution.

(TO BE CONTINUED.)



## PUBLISHER'S DEPARTMENT.

EDITED BY

A. L. HUMMEL, M.D.

---

### A NEW METHOD OF MAKING MEDICINES.

It has long been felt by our leading physicians, that the use of fluid-extracts, tinctures, etc., is deleterious at times, from the fact, that in order to get the full benefit of the active principle of the root, bark, or leaf, it has been necessary to administer so much of the gum resin, vegetable albumin, vegetable caseine, humus, etc., in the extractive matter in combination with the volatile oils which are desired.

On this account, chemistry has been directed to abstracting the alkaloids in order to concentrate the effectual properties of drugs, but not with pronounced success outside of the surgical branch of the profession.

Experiments carried on for several years with the *torula-cerevisæ*, or yeast plant, have demonstrated several new features in bio-chemistry, and among them is the fact that yeast can be purified in such a manner as to obviate the danger of souring for a considerable period; and thus in wineries and breweries, instead of using ant-acids after the product is barrelled, it can be avoided by proper preventative methods during the manufacture.

This has led to a new process of making a wine by direct fermentation, from the root, bark, or leaf, as is now being done by the Enterprise Chemical Company, of Philadelphia, in the following manner. The drug selected in the raw state, is digested by the alkali judged most desirable, whether it be lime, soda, or potash, and macerated, and percolated by any improved process (preferably Squibbs'), then it is added in proper proportions to syrup and water, in which the amount of alcohol is regulated by the quantity of saccharum contained in the menstruum, to this a small portion of *ale* yeast is added at the proper temperature, and fermentation is set up. When the mass has arrived at the proper stage, the fermentation can be stopped by an electric current, and the yeast germs can be filtered out after electrolysis, leaving a more or less alcoholic menstruum containing the volatile oils required, and in much greater purity than by the old methods, in which cheap and adulterated wines and spirits were used, by adding a small quantity of alcohol sufficient to bring the whole up to a standard strength of 10 or 12 per cent., and using a little headwork all danger of acetous fermentation can be avoided. It is respectfully suggested to the profession, that if the volatile oils are not changed or destroyed during this process, it certainly gives a means of administering them in unequalled purity and strength, and in the wine called *Nervo-vino* (containing 30 grains of coca erythrox., and 15 grains of pruni-virg. to the ounce) it has produced some peculiar and gratifying results. Women during the menstrual period have received great relief from the wine called *Nephro-vino* (made of hops and juniper), its tonic sedative action being due no doubt to the choline and lupuline, and as a mild diuretic as well, it seems to indicate this method of manufacture as being the best deserving of attention.

## THERAPEUTIC VALUE OF MINERAL WATERS.

"Of all the prescriptions made up with a view to alterative effect, none can be compared with mineral waters," says John Bell, M.D., F.C.P., etc. According to Patissier, "They bring about in the animal economy an intimate transmutation,—a profound change." The deservedly high reputation which the mineral springs of Germany (and more particularly the Seltzer waters) have obtained an account of their beneficial qualities, has induced numerous invalids to visit them from all parts of the world. It is impossible, however, to send any but a very small percentage of our patients to these justly celebrated springs, and it is impossible, too, to transport these waters, for they soon lose many of their most valuable properties when bottled. To substitute an artificial preparation which would not be liable to these objections, but which would also contain every essential ingredient with which this celebrated spring is impregnated, would certainly be of much advantage to the profession and its patients.

Tarrant's Seltzer Aperient seems to have accomplished this object. It is prepared on an entirely new principle from a late and accurate analysis of the celebrated Seltzer Springs in Germany. Dr. Mead, an eminent medical practitioner observes: "The experience of many years has not lessened the confidence of the public in the use of these artificial mineral waters, it having been found that their medicinal qualities are equal to those of the natural springs, and that in many instances they may be rendered superior, by adding, if necessary, a larger quantity of the most useful substances, or by omitting others which are either unnecessary or injurious to health." Used as a mild laxative, as an alterative and tonic, and as a saline draught it will be found most pleasant and efficient.

Tarrant & Co., New York City, will send full information on the subject.

## HORSFORD'S ACID PHOSPHATE.

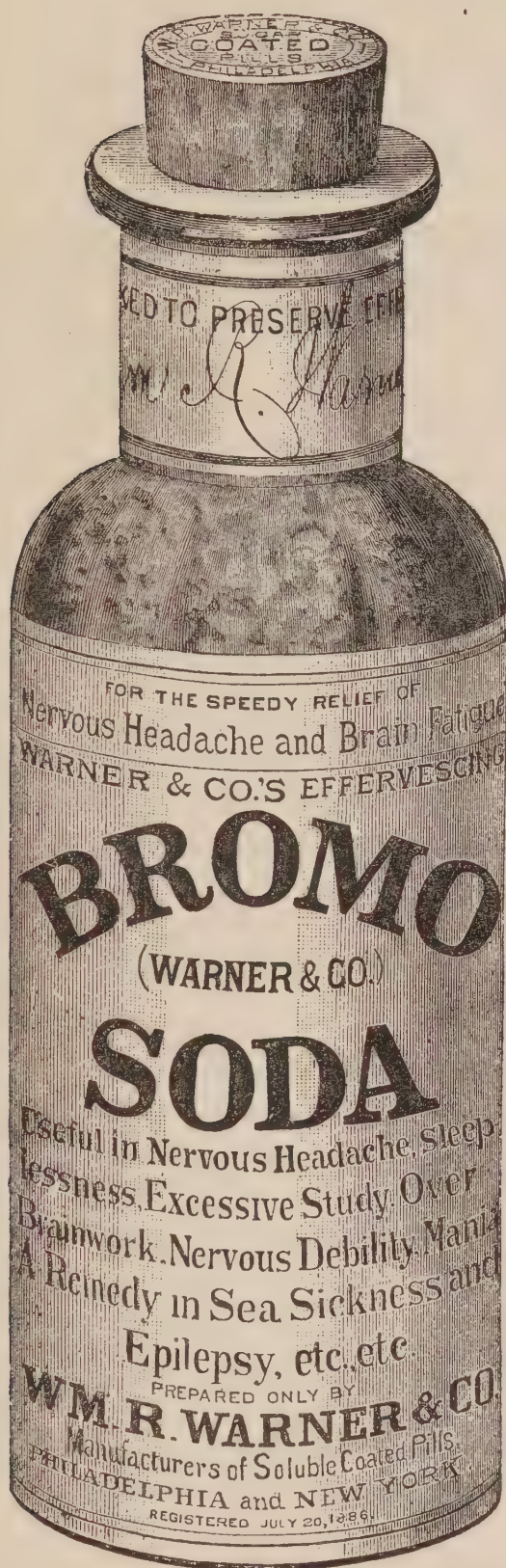
Attention is invited to the advertisement of Professor Horsford's Acid Phosphate, which appears on the fourth cover page of this issue. The value of phosphorus and the phosphates, therapeutically considered, is universally recognized by the profession, and this preparation of the phosphates seems to more fully and completely meet the general want than any other. It is indorsed by physicians of all schools in the United States and is the standard preparation with very many physicians in foreign countries. It differs from the so-called hypophosphites, in that it does not deprive the blood of any of its oxygen, and is readily assimilated. It is especially serviceable in dyspepsia, indigestion, mental and physical exhaustion, insomnia, nervousness, etc., and as a menstruum for the administration of such alkaloids as strychnia, morphia, quinia, and other organic bases that are usually exhibited in acid combinations. It also acts as a nutriment to the cerebral and nervous systems, makes a refreshing and nutritious drink in fevers, and with water and sugar a delicious beverage.

Physicians who have not used Horsford's Acid Phosphate, and who wish to test it, will be supplied with a sample on application, without expense, except express charges.





When prescribing PILLS OF ANY KIND secure them perfectly soluble and quickly assimilable by specifying "W. R. W. & CO.'S."



FOR ANÆMIA.

SCROFULA.

## PIL: CHALYBEATE COMP.

(WM. R. WARNER & CO.)

Formula:—Carb. Protoxide of Iron, gr. ijss.  
Ext. Nux Vom., . gr. ½.

ADVANTAGES:—Does not constipate, is easily absorbed, is nerve tonic and quickly soluble.

RHEUMATISM.

INDIGESTION.

## PIL: ANTISEPTIC COMP.

(WM. R. WARNER & CO.)

Formula:—Sulphite Soda, . gr. i.  
Ext. Nux Vomica, gr. ½.  
Salicylic Acid, . gr. i.  
Powd. Capsicum, gr. i-10,  
Concent'd Pepsin, gr. i.

Try this Pill used in all cases where there is no well-defined malady, yet patient is not well.

A SPECIFIC FOR VOMITING  
OF PREGNANCY,

AND REPLACES PEPSIN,  
TO WHICH IT IS  
SUPERIOR.

**INGLUVIN**  
VENTRICULUS CALLOSUS GALLINACEUS.

USE WHENEVER PEPSIN  
IS INDICATED. ITS ACTION IS  
CERTAIN AND CURES WHEN PEPSIN FAILS.

When the Potash Salt is preferred the Physician can prescribe—  
**WARNER & CO.'S EFFERVESCENT**

**BROMO**  
(WM. R. WARNER & CO.)  
**POTASH**

Speedily relieves Nervous Headache, Sleeplessness and  
Brain Fatigue.

**WM. R. WARNER & CO., PHILADELPHIA.**

# TREATMENT OF CONSUMPTION BY GASEOUS ENEMATA

## A SIMPLIFIED APPARATUS

FOR THE

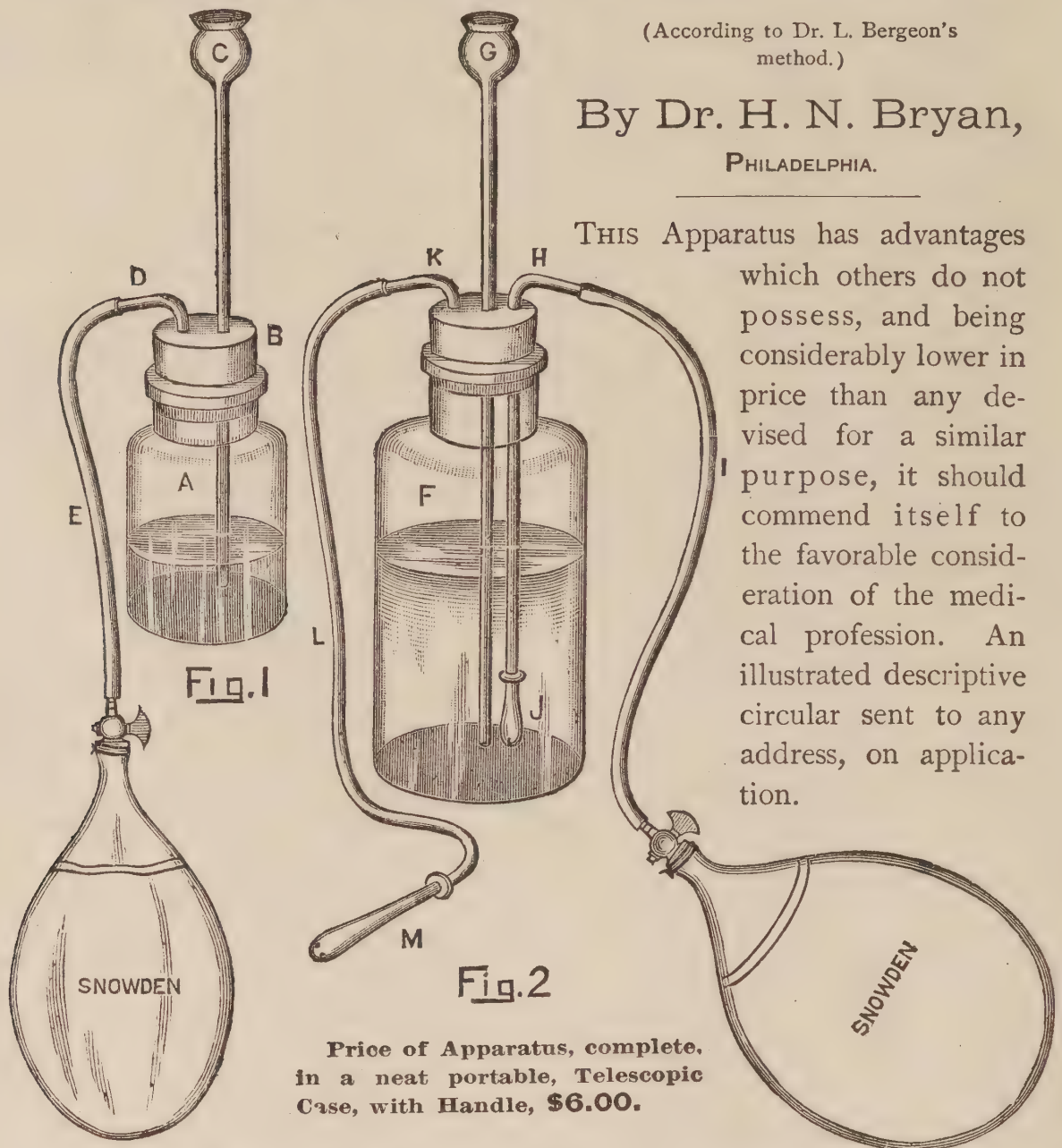
### Preparation and Introduction of Gases into the Bowel.

(According to Dr. L. Bergeon's method.)

By Dr. H. N. Bryan,

PHILADELPHIA.

THIS Apparatus has advantages which others do not possess, and being considerably lower in price than any devised for a similar purpose, it should commend itself to the favorable consideration of the medical profession. An illustrated descriptive circular sent to any address, on application.



Price of Apparatus, complete.  
in a neat portable, Telescopic  
Case, with Handle, \$6.00.

**Levis' Metallic Splints.**—*Flexible, Perforated, Nickel-plated,* conformable to every size and condition of limbs. *Very Light, Indestructible, and Inexpensive.* The complete set consists of 21 pieces, in a neat, compact case. Full descriptive circulars sent on application. Price, \$15.00 per set.

**The Polyclinic Never-Leaking Ether Bottle, Price, \$1.00.**

A Sample Card of IRON-DYED SILK (14 sizes) will be sent to any address on application. Price per reel, 10 cents.

**WILLIAM SNOWDEN,**

Manufacturer, Importer and Exporter of Surgical Instruments,

NO. 7 S. ELEVENTH ST., PHILADELPHIA.



Established

1834

# TARRANT'S EFFERVESCENT SELTZER APERIENT.

The Original  
Effervescing Aperient.  
The Reliable  
Laxative  
Cathartic.

For Constipation, Dyspepsia  
accompanied by Acidity, Sick Headache,  
Heartburn and in the Nausea and  
Constipation of Pregnancy it  
will be found invaluable.

TARRANT & CO.  
Manufacturing Pharmacists.

New York

PALATABLE: SAFE: EFFICIENT:  
Readily taken by the most delicate INVALIDS.



**SUNNYSIDE,** } A private Medical Home for { 128 PARK PLACE, near Prospect Park,  
Nervous Invalids. } BROOKLYN, N. Y.

This well-known Home, established in 1876, with handsomely furnished apartments, receives a limited number of either sex of *Mental and Nervous Diseases, Dipsomania and Opium Habit*, and offers to such patients all the attentions, comforts and attractiveness of a home, together with medical treatment. Application may be made either by mail or personally. **Opium Habit and Dipsomania** receive special attention, and patients enjoy the strictest privacy. **TRAINED NURSES.**

Consultation hours until 11 daily, and after 4. **EDWARD C. MANN, M.D.,** Medical Supt.

# Mears' Practical Surgery.

By J. Ewing Mears, M.D.

Lecturer on Practical Surgery and Demonstrator of Surgery in Jefferson Medical College, Professor of Anatomy and Clinical Surgery in the Penna. College of Dental Surgery, etc.

With 490 Illustrations.


SECOND EDITION. REVISED  
AND ENLARGED.

794 Pages. 12mo.

## PRICES:

Cloth, . . . . . \$3.00

Sheep, . . . . . 3.50

 As it is our rule to allow a discount of 20 per cent. from catalogue prices, when the book is not sold by subscription—the purchaser paying shipping expenses—the net prices will be, Cloth, \$2.40; Sheep, \$2.80. Postage 20 cents extra.



## Mears' Practical Surgery

Includes chapters on Surgical Dressings, Bandaging, Fractures, Dislocations, Ligature of Arteries, Amputations, Excisions of Bones and Joints.

This work gives a complete account of the methods of antiseptic surgery. The different agents used in antiseptic dressing, their methods of preparation, and their application in the treatment of wounds are fully described—with this work as a guide it is possible for every surgeon to practice antiseptic surgery. The great advances made in the science and art of surgery are largely due to the introduction of antiseptic methods of wound treatment, and it is incumbent upon every progressive surgeon to employ them.

## OPINIONS.

### AMERICAN JOURNAL OF THE MEDICAL SCIENCES.

"It is full of common sense, and may be safely taken as a guide in the matters of which it treats. It would be hard to point out all the excellences of this book. We can heartily recommend it to students, and to practitioners of surgery."

### BUFFALO MEDICAL AND SURGICAL JOURNAL.

"We do not know of any other work which would be of greater value to the student in connection with his lectures in this department."

**F. A. DAVIS, Medical Publisher,**  
**1217 FILBERT ST.,**  
**PHILADELPHIA, PA.**



# PHYSIOLOGICAL CHARTS OF LIFE

**FIVE IN NUMBER.**

---

THE need has long been felt for a good Chart of Physiology—something that would, in a convenient form, show the full outlines of the subject without compelling one to read over numberless pages to clear up some simple point that could be seen at a glance if on a proper chart.

Until the present, nothing of the kind has been issued; but it affords us much pleasure, and doubtless will our numerous patrons, to bring to their notice

## ❖ FIVE ❖ CHARTS ❖

which we have recently been fortunate enough to get control of which cover the entire subject.

We have never in our varied experience as dealers in Medical Literature seen anything that will compare with these charts either in correctness of outline, details of drawing, comprehensiveness, or beauty of execution; the name of every bone, muscle, vein, etc., being clearly printed on the part, so that it is impossible for even a novice to mistake one for another. *The entire subject is arranged in groups, and each group complete in itself and forming one chart, so that they can be obtained separately or as a whole at the option of the buyer.*

Such parts as are difficult of observation by reason of their smallness are magnified so as to show clearly and fully the most minute structure.

**Printed in Oil Colors in the best style of  
Chromo-Lithography.**

*Price of Set, Cloth Mounted, on Rollers, - \$15.00.*

(Shipping Expenses Prepaid.)

EACH CHART IS THREE FEET LONG AND TWO FEET WIDE. Send for full descriptive circular. For sale by

**F. A. DAVIS, Medical Publisher & Bookseller,**


**1217 FILBERT STREET, PHILADELPHIA, PA.**



# Horsford's

## Acid Phosphate.

(LIQUID.)

 *A Preparation of the Phosphates that is readily assimilated by the system.*

It is not a secret or quack medicine, but is made in accordance with well-known scientific principles, under the personal supervision of the well-known Professor Horsford, who has made the subject of the phosphates a life study.

ESPECIALLY RECOMMENDED FOR

**Dyspepsia, Mental and Physical Exhaustion, Indigestion, Headache, Nervousness, Wakefulness, Impaired Vitality, etc.**

Prescribed and endorsed by Physicians of all schools.

It combines well with such stimulants as are necessary to take.

**IT MAKES A DELICIOUS DRINK  
WITH WATER AND SUGAR ONLY.**

Physicians who have not used Horsford's Acid Phosphate, and who wish to test it, will be furnished with a sample without expense, except express charges.

*For Sale by all Druggists Everywhere.*

*Pamphlet Free.*

**RUMFORD CHEMICAL WORKS,**

**Providence, R. I., U. S. A.**

**BEWARE OF IMITATIONS.**